2015

Exploring Protégé Perceptions of Success and Failure in Formal

Jeffrey Wayne Strickland

Walden University

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Abstract
Exploring Protégé Perceptions of Success and Failure in Formal Mentoring Programs
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Dissertation Submitted in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy Public Policy and Administration

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Abstract

Since the 1993 inception of the mentoring program in the U.S. Navy, little evidence has been collected on its effectiveness, primarily because of difficulties with instrumentation and conceptualization in conducting such assessments. The purpose of this correlational study was to identify external factors affecting military protégés’ satisfaction with their mentoring experience. The conceptual framework of this study was based on Kram’s mentor model theory, which includes career and psychosocial support functions. A 5-item Likert survey instrument was designed to measure the dependent variables of satisfaction with career mentoring and satisfaction with personal mentoring against 10 independent variables: dyad compatibility, mentor training, dyad geography, mentoring functions, mentor/protégé gender, challenging job assignments, protégé visibility, mentor leadership, time management, and protégé career expectations. The survey was completed by a total of 538 participants, selected among the service personnel of 17 U.S. Navy aviation squadrons in the enlisted ranks of E1 through E6. Ten simple linear regressions were performed with a level of significance of .001. All 10 independent variables were significantly related to satisfaction with both career and personal mentoring. The study results suggested, however, that career mentoring was favored to a greater extent than was personal mentoring by protégés, with the effect sizes ranging from 5% to 48% for career mentoring and from 3% to 22% for personal mentoring. Furthermore, Kram’s theory was a useful lens to evaluate mentoring in this population. The implications for positive social change include informing program administrators in the U.S. Navy of the benefits to their units to evaluate and improve the design and the implementation of career and personal mentoring.
Exploring Protégé Perceptions of Success and Failure in Formal
Mentoring Programs

by

Jeffrey W. Strickland

Dissertation Submitted in Partial Fulfillment

Of the Requirements for the Degree of

Doctor of Philosophy

Public Policy and Administration

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July 2015
Dedication

This paper is dedicated to my family and friends who have supported me throughout my doctoral studies. Without their advice, support, and patience, this study may have never been completed. I extend a warm appreciation to Dr. Lori Demeter and Dr. Morris Bidjerano for their assistance during the writing phase of this study. Special thanks go out to Dr. Tommy Walters at Embry Riddle Aeronautical University for his technical insight and suggestions during the test instrument development and evaluation phase.
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Electronic Attack Squadron One Three Two (VAQ-132)
Electronic Attack Squadron One Three Three (VAQ-133)
Electronic Attack Squadron One Three Four (VAQ-134)
Electronic Attack Squadron One Four One (VAQ-141)
Electronic Attack Squadron Two Zero Nine (VAQ-209)
Patrol Squadron One (VP-1)
Patrol Squadron Three Zero (VP-30)
Patrol Squadron Four Six (VP-46)
Strike Fighter Squadron One Three Seven (VFA-137)
Strike Fighter Squadron One Four Seven (VFA-147)
Strike Fighter Squadron One Zero Six (VFA-106)
Carrier Airborne Command and Control Squadron One Two Six (VAW-126)
Helicopter Sea Combat Squadron Ten (HS-10)
Helicopter Maritime Squadron Four Zero (HSM-40)
Helicopter Maritime Squadron Seven Zero (HSM-70)
Fleet Logistic Support Squadron Five One (VR-51)
Fleet Logistic Support Squadron Four Zero (VRC-40)
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Chapter 1: Introduction to the Study

**Introduction**

Previous studies on formal mentoring programs have shown a variety of predictor variables affecting the mentoring dyad (Barak & Hasin, 2009; Bozeman & Feeney, 2008; Egan, 2005; Godshalk & Sosik, 2000). The term *dyad* used throughout this study refers to the mentor and protégé. Researchers have exhausted efforts in questioning why some formal mentoring programs are successful in developing protégés while others fail. The formal programs are compared to informal programs, where the relationship develops naturally through mentor and protégé similarities, interests, and interactions (Okurame, 2008). Although there is no consensus on the optimal duration of a mentoring program, some researchers feel that 6 months to 1 year is sufficient time (Kim & Egan, 2011). Moreover, most agree that independent variables do play a part in the outcome of mentoring programs (Emelo’s, 2011; Rolfe, 2008). Despite a concerted effort to determine if predictor variables, such as gender, dyad compatibility, and ethnicity, play a role in the process (Darling, Bogat, Cavell, & Sanchez, 2006), researchers have yet to confirm which one affects the formal mentoring relationship the most. Moreover, past meta-analyses and empirical studies that examined the mentor's leadership style, visibility, geography, mentoring functions, mentor training, and challenging job assignments offer little compelling evidence in support of these factors playing a mediating or moderating role in the mentor/protégé relationship (Hamilton, 2008; Jacobi, 1991; Young & Perrewe, 2000). Some areas of formal mentoring programs, such as differences in sex, have received considerable attention as to whether male or female
protégés receive the appropriate amount of attention in mentoring relationships (McNamara, McNeil, & Chang, 2008).

Formal mentoring practices are now found in most organizations and academic settings (Chao, 2009; Okurame, 2008; Wallace, 2009). Despite its widespread acceptance, formal mentoring may not be sufficient or even effective when compared to informal mentoring approaches. According to Okurame (2008), formal mentoring is used by management to give the organization a competitive advantage. Formal mentoring may also be used to identify personnel with management and leadership characteristics (Siegal, Schultz, & Landy, 2011). While these studies bring considerable recognition to the field of mentoring, they only serve to address a common problem plagued in past research efforts. Bozeman and Feeney (2007) went as far as to say that mentoring research “adds up to less than the sum of its parts” (p. 719). What this implies is that the total research effort exerted to date in the discipline of mentoring is fragmented and dilapidated and does not contribute to new learning objectives or implementation of new techniques. Rolfe (2008) added that mentoring is not a one-size-fits all concept and program developers should invest time in the design phase in areas such as developing participant training schedules. Mentoring is now seen as being pluralistic as the diversity in the United States workforce and military is increasing (Wilks, 2008). Furthermore, Wilks (2008) asserted that military mentors and protégés must change their attitudes to accept diversity in their workplace. Wilks continued that education on diversity can instill self-reflection and cultural competency in mentoring relationships. This view of diversity was also echoed by Kim and Egan (2011), who pointed out that cross-cultural
mentoring maybe able to help protégés settle into their new environments. Still other research findings (Udeh & Omar, 2009) have indicated that those individuals mentored in diverse relationships benefited greatly from their involvement. Implementing revisions and recommendations to meet diversity at the organizational level seems to be non-existant as well.

Research efforts on mentoring in the U.S. Navy program are a relatively new phenomenon. Since the inception of the mentoring program in 1993, little research has been performed to accurately assess its effectiveness of training and developing United States sailors in various fields and at all rank levels. Formal mentoring programs in the U.S. Navy can be adversely affected by the diversity of the military members themselves (DON, 2005; Knouse, 2000). This diversity, according to Udeh and Omar (2009), may actually be the advantage military units need for developing future leaders.

Group mentoring is another strategy that has received little attention in military contexts. Carvin (2011) conducted a study on this topic, shedding new light on mentoring in groups and the benefits it can bring to an organization as an effective training tool. Evaluations of existing formal programs with large groups of participants have yielded results that have not met the expectations of the protégés, mentors, and program coordinators (Kirchmeyer, 2005). Despite intense previous research efforts to describe formal mentoring programs in various contexts, little work has been done on the U.S. Navy’s formal mentoring program and its successes and failures. This is an abrupt departure from program design approaches identified by Diagne (2008). Diagne found that organizations should take a hands-on approach to designing and evaluating their
programs that meet needs and objectives. This first starts by identifying other mentoring programs and analyzing their successes and failures in varying contexts.

**Problem Statement**

Little research has been performed in military formal mentoring contexts, which may explain why the U.S. Navy’s mentoring program is affected by 10 common independent variables that have been taken for granted and given little attention. This study’s perspective views the independent variables (a) dyad compatibility, (b) mentor training, (c) dyad geography, (d) mentoring functions, (e) mentor/protégé gender, (f) challenging job assignments, (g) protégé visibility, (h) mentor leadership, (i) time management, and (j) protégé career expectations as important to the mentoring dyad. In addition to these variables affecting the relationship, accurately defining the mentoring process and the functions embodied is also problematic. Bozeman and Feeney (2007), Haines (2003), Egan (2005), and Allen, Lentz, and Eby (2006) noted that the key problem in the discipline is separating mentoring functions from typical functions, such as supervising, instructing, and coaching. These customary leadership actions performed by supervisors and managers could be construed as a form of mentoring when in fact they may not be acting in the capacity of a mentor.

A second dilemma facing the mentoring discipline and one that may have strong implications in this study is defining and employing the appropriate measurement tool to assess the dyad’s perspectives on mentoring. Two questionnaires—the multifactor leadership questionnaire (MLQ-5X) and the mentoring relationship questionnaire (MRQ)—are two widely used test instruments in the field of formal and informal mentoring. For
example, Sosik and Godshalk (2004) used the versatility of the MLQ-5X questionnaire to examine mentor leadership styles and how they influence mentoring functions in both career and psychosocial support areas. On the other hand, Burris, Kitchel, Greiman, and Torres (2006) relied on the MRQ to collect data on formal mentoring programs involving protégé satisfaction with the mentoring dyad. To date, there have been no standardized rules about which measurement tool is more effective at gathering data. Thus, the choice depends on the individual researcher and his or her particular needs and contexts under which their study is undertaken. Research into this discipline is not limited to these two instruments; other researchers have relied on their own personal designs to gather data (Allen et al., 2009; Lyons & Oppler, 2004; Thomson & Zand, 2010).

The launch of this study led to further inquiry into standardized test instruments that evaluate the formal mentoring process. This included surveys that reflect both the mentor and protégé’s perspectives on how effective the program is for their career and psychosocial support. Results from this study shed light on the differences between mentoring and supervising functions and revealed how the independent variables affect the relationship in formal mentoring settings.

**Research Questions**

The research questions that guided this study were as follows:

1. Is compatibility in the dyad affecting the protégé’s satisfaction with the mentoring process?
2. Is the mentor's training affecting the protégé's satisfaction in a formal mentoring setting?
3. Is the aviation command’s operating and geographic environment affecting the
protégé's satisfaction with the mentoring process?

4. Are adequate mentoring functions increasing the protégé's satisfaction in both
career and personal settings?

5. Does mentor/protégé gender make a difference in the level of mentoring
satisfaction provided in formal mentoring programs?

6. Is the mentor providing challenging job assignments for the protégé for
professional growth?

7. Is mentorship networking increasing the protégé's satisfaction for career
advancement?

8. Does the mentor's leadership style influence protégé satisfaction in the career,
advancement, and development phases of the mentoring relationship?

9. Is time management between mentor and protégé a factor in the protégé's
satisfaction with the mentoring process?

10. Is there a relationship between protege career expectations and their
satisfaction in formal mentoring settings?

Factors that were examined included compatibility between mentor and protege
goals, mentor training, dyad geography, perceptions of adequacy of mentoring activities,
mentor’s gender, perceptions of level of challenge in job assignments, perceptions of
networking opportunities for career advancement, mentor leadership, time management,
and protégé career expectations.
Hypotheses

$H_{01}$: The compatibility between mentor and protégé goals is not correlated with protégé’ perceptions of satisfaction.

$H_{A1}$: The compatibility between mentor and protégé goals is correlated with protégé’ perceptions of satisfaction.

$H_{02}$: Mentor training is not correlated with protégé satisfaction.

$H_{A2}$: Mentor training is correlated with protégé satisfaction.

$H_{03}$: Dyad geography is not correlated with protégé satisfaction in different command operating environments.

$H_{A3}$: Dyad geography is correlated with protégé satisfaction in different command operating environments.

$H_{04}$: Perceptions of adequacy of mentoring activities are not correlated with protégé satisfaction in work settings on or off duty.

$H_{A4}$: Perceptions of adequacy of mentoring activities are correlated with protégé satisfaction in work settings on or off duty.

$H_{05}$: Mentor’s gender is not correlated with perceptions of satisfaction.

$H_{A5}$: Mentor’s gender is correlated with perceptions of satisfaction.

$H_{06}$: Perceptions of level of challenge in job assignments are not correlated with perceptions of protégé satisfaction.

$H_{A6}$: Perceptions of level of challenge in job assignments are correlated with perceptions of protégé satisfaction.
\(H_07\): Perceptions of networking opportunities for career advancement are not correlated with protégé satisfaction.

\(H_{A7}\): Perceptions of networking opportunities for career advancement are correlated with protégé satisfaction.

\(H_{08}\): Mentor leadership in career, advancement, and development are not correlated with protégé satisfaction.

\(H_{A8}\): Mentor leadership in career, advancement, and development are correlated with protégé satisfaction.

\(H_{09}\): Time management is not correlated with protégé satisfaction for dyads who meet on an irregular basis.

\(H_{A9}\): Time management is correlated with protégé satisfaction for dyads who meet on an irregular basis.

\(H_{010}\): Protégé career expectations are not correlated with protégé satisfaction in a formal mentoring setting.

\(H_{A10}\): Protégé career expectations are correlated with protégé satisfaction in a formal mentoring setting.

**Purpose of the Study**

The purpose of this study was to fill the gap in the related literature by examining the failures and inadequacies in the U.S. Navy’s formal mentoring program by applying theoretical concepts used in successful programs in the profit and non profit sectors. The intent was to raise awareness of these important areas and to provide credible data to support these recommendations and revisions for change in formal mentoring practices.
These changes and recommendations are not only reserved just for the U.S. Navy, but also apply to organizations external to the military. Organizations extraneous to the military may use the study findings to develop or enhance existing formal mentoring programs under their control. Launching this study led to increased awareness of how vital mentorship programs are to the U.S. Navy as well as other military branches, such as the U.S. Air Force, U.S. Army, U.S. Marine Corps, and the U.S. Coast Guard. The study results provided individual U.S. Navy command mentoring program managers, mentors, and protégés a strong tool to enhance their personal and career goals and objectives. Traits acquired from a successful formal mentoring relationship may be applied to the public and private sectors when sailors finish their military service.

**Theoretical Framework**

Kram's (1983) mentor model theory served as theoretical framework for this study. Kram's theory was used to examine the career and psychosocial aspects of the mentoring process relationship. These two functions are most commonly studied in formal and informal mentoring (Bozeman & Feeney, 2007; Burris et al., 2006; Pellegrini & Scandura, 2005; Sosik & Godshalk, 2004) and played a pivotal role as independent variables in this study. Kram’s theory was tested by examining survey responses on the following independent variables: (a) dyad compatibility, (b) mentor training, (c) dyad geography, (d) mentoring functions, (e) mentor/protégé gender, (f) challenging job assignments, (g) protégé visibility, (h) mentor leadership, and (i) protégé career expectations.
A unique aspect of this theory was its comprehensive use in past mentoring studies, which helped reveal flaws or program structural shortcomings. This was most often attributed to mentoring program designers not articulating what the goals and objectives of the program should encompass. Kram’s theory provided overall support for this study, particularly in correlations to determine if there was a statistical significance between independent variables.

**Operational Definitions**

The study used military acronyms not typically found in periodicals, textbooks, and online literature sources. Some military acronyms are quite long and may induce confusion on the reader’s part. For this reason, an appendix was included to inform readers of the complete title, definition, and the intended use of the term or responsibility of the military organization. The following terms provided the setting for the study. It should be noted these definitions are generic terms and take on differing meanings, depending on the study context and researcher.

*Mentor*: A senior person who assists junior or younger persons to aspire or achieve goals and objectives (McKimm, Jolie, & Hatter, 2003). The Air Force defines it as a guide or counselor (AFI 36-3401, 2000) while the U.S. Navy defines it as a trusted guide or counselor who is involved in the development and support of less experienced personnel (NPC, 2009, p. 2). In generic terms, a mentor is an individual who imparts knowledge or skills on behalf of another individual(s).
**Mentoring:** Mentoring was defined by the U.S. Navy as, “a guidance relationship between two people, where a trusted person (mentor) helps another person (protégé) learn something the latter would otherwise have learned less proficiently, more slowly, or not at all” (Navy Personnel Command, 2009, p. 1). This definition is generic at best, but its meaning is synonymous with definitions used by other researcher (Allen et al., 2006; Bozeman & Feeney, 2008; Whiting & Janasz, 2004). The mentoring process can be considered a reciprocal activity, whereby both the mentor and protégé extricate benefits from the relationship. Other researchers (Rekina & Ganesh, 2012) defined the process as an approach where an older, more experienced person acts in the capacity of a guide and friend to a younger, less experienced person. Wallace (2009) described it as a relationship that stimulates emotional and intellectual growth in new or inexperienced people. Other researchers (Chium-Lo & Ramayah, 2011) used the term interchangeably with coach, sponsor, and colleague. Mentoring is by no means limited to a one-or-one relationship, but may involve multiple mentors or protégés (DeJanasz, 2004), and even groups (Bozeman & Feeney, 2007).

**Protégé:** The definition of a protégé, or a mentee, takes on several varying definitions. Casavant and Cherkowski (2001) define a protégé as the recipient of the mentor’s work whose achievements may contribute to the success of the organization as well as personal goals and objectives. This definition may be too broad and can be better summed up by the U.S. Navy’s definition as a junior person who takes on guidance from a mentor to enhance his or her learning process (NPC, 2009, p. 3).
Assumptions

It was anticipated at the onset of this study that obstacles would be encountered at different stages of the research process. According to Gay, Mills, and Airasian (2006), three major study limitations may exist, namely the overall length of the study, number of participants, and presence of the mentoring program within Naval aviation squadrons. First, the intended length of the study was to be sufficient in order to obtain credible quantitative data without disrupting the work schedules of the participants. It should be noted the test instrument measured the participants’ perceptions at one particular point in time because of the continuous transfer rate of personnel into and out of a squadron. Thus, although duration of this study did not appear to be a cause for setbacks, acquiring an adequate sample size was a problem. Second, with respect to sample size, U.S. Navy aviation squadrons vary in manpower from a few dozen personnel, up to an average of 150 personnel, which was an issue, given that Field (2009) proposed having 15 participants per independent variable. Using this approach would require roughly 150 participants; however, this number would not allow for generalization to the entire U.S. Navy aviation sector. Therefore, to mitigate these issues, a sample size of 10% percent, or roughly 15 participants was taken from each squadron. This represented 10% of the total squadron population. The third major assumption in this study was that all U.S. Navy commands have established mentoring programs and all personnel assigned to those commands take an active participatory role in the program. This assumption was verified using a Likert survey test instrument.
Limitations

In this study, three limitations may have affected the validity of the results. The first limitation was the collection of the test instruments from all participants. It was possible that negative survey results maybe reviewed by Command Career Counselors (CCC), Commanding Officers (CO), and Command Master Chiefs (CMC) and be disposed of because of fear and embarrassment that their program is not favorable among mentors and proteges. Failure to return the surveys on the squadron’s behalf may have affected the response ratio as well as all statistical testing.

The second limitation pertained to the population sample frame and the unit of analysis. U.S. Navy aviation squadrons will vary in size in terms of number of members and aircraft. Some aviation commands maybe larger than others and will therefore have a larger population to select from. The total population in this study was defined as members in both the commissioned officer and enlisted ranks of each command. The study was conducted on enlisted members only. For this reason, I only included enlisted members in the ranks of E1 through E6 as participants, instead of attempting to sample members of all ranks. This smaller sample nevertheless represented a majority of the total squadron population, since enlisted military members outnumber commissioned officers in every aviation squadron. Critics may point out that the study results cannot be generalized to the larger population, since commissioned officers were not included. The larger population in this case was all U.S. Navy commands in the continental states and those operating abroad. Conducting a study that does not include participants from the surface (ship) and subsurface (submarine) fleets may have limited generalizations to the
actual operating posture of the U.S. Navy’s overall mentor program. However, it was not feasible to try and contact every member due to geographical distances, deployment cycles, personnel transferring, and members retiring or exiting military service.

The third limitation stemmed from the sampling method adopted. The simplified random sampling method may not have provided a representative sample of the total population. This included the individual aviation squadrons, as well as other U.S. Navy commands. Trochim (2001) and Rossi, Lipsey, and Freeman (2004) have found that simple random sampling provides too few sample points and may not accurately represent the population under study. However, using a stratified sample design in this case was the most appropriate due to vast distances and time constraints. This type of sampling targets specific groups instead of individuals, or enlisted participants in the ranks of E1 to E6 in this case. Critics may point out that this is a form of personal bias because not everyone in the population has an equal chance of being selected. Justification of this decision comes from the direct observations of enlisted members only and their interactions with their mentors.

The fourth limitation was that only aviation squadrons participated in this study. Including all areas or fields of the U.S. Navy was too difficult and beyond the scope of the study.

**Significance of the Study**

The study findings were not bound to military and Department of Defence (DOD) applications. Private sector organizations and individuals removed from the military as well as government entities must have considerable insight as to how they can structure
their own formal mentoring programs. The independent variables examined in this study were often found in previous studies in different contexts (Allen, Johnson, Biga, Rodopman, & Ottinot, 2009; Lyons & Oppler, 2004; O’Brien, Biga, Kessler, & Allen, 2010). What is important is whether the various contexts may be acting as a mediator on the independent variable effects. In this study, I compared and contrasted 10 independent variables under different operating environments to elicit protégé perceptions on the effectiveness of the program.

This study differed from previous approaches in that protégés reported their views on the effectiveness of an active formal mandatory program. This is quite a departure compared to informal programs where the relationship develops naturally from sharing similar interests, goals, and objectives. Although this formal mentoring program shared some of the same characteristics found in other studies (Thomson & Zand, 2010), the participants cannot relinquish their participation in the program. The most notable characteristic was the lack of compatibility between mentor and protege. Hence this study advanced existing knowledge by examining and reporting how success can be achieved in formal mentoring programs by simply developing a better understanding of the variables involved. Developing a structurally sound and carefully designed program for mentoring can increase longevity and efficiency in the dyad.

This study’s results benefited U.S. military units that manage formal mentoring programs. According to Navy Personnel Command (NAVPERSCOM instruction 5300.1), “it’s developing 21st leaders” (para 1) by building a mentoring culture for all of its sailors. The U.S. Navy revealed a firm commitment to fostering the success of sailors
at work and in their personal lives. Preparing sailors to assume leadership roles and take on challenging job assignments was another important aspect of mentoring (Bailey, 2004). Enhancing the personal and career goals of the sailor was not the only benefit of a successful formal mentoring program, as operational readiness of the individual command can also be realized (NAFMISAWAINST 1700.1, 2009). Readiness for a command implied that the squadron’s members are fully qualified in all areas of their job and the command is ready to deploy to geographic regions outside of the continental United States. Readiness can most likely be improved by using a formal mentoring program, which is why this format was typically chosen by program managers. The findings of this study had a significant impact on communities and organizations external to the military. Kessler Mentoring and Take Stock in Children are two organizations that provide mentoring to low income grade school children and in return offer them college scholarships for successful completion of their program. These organizations are constantly seeking out experienced mentors and have often relied on U.S. Navy members to perform this role because of their experience in mentoring relationships. Therefore, it is imperative that successful mentoring relationships foster characteristics that military members exiting the service may use in other communities.

**Implications for Social Change**

This study has the potential for social change in three areas. First, it can benefit external communities by allowing military members to mentor individuals, such as grade school children. This approach allows for the sharing of knowledge, information, and
skill sets. One unique aspect of this study was the ability to transfer successful mentoring techniques and strategies from external organizations to the military and vice versa. One key area that makes this possible was diversity among the military services. Knouse (2000) reported the U.S. military is the largest employer in the world in terms of diversity among its members. It is this diversity in areas such as ethnicity that allows members to assume a mentoring relationship and apply it to other contexts.

Second, the study provided for a greater understanding of formal mentoring programs and processes. Knowledge gained from the statistical analyses offered mentoring program managers with information on what works and does not work in formal programs. This included providing an increased understanding of all independent, dependent, and mediator variables involved. Creating an impact on communities and organizations requires that safety be a top concern for those involved. Nachmias and Nachmias (2008) pointed out that research should not harm the participants mentally or physically. This means mentoring programs must address ethics, confidentiality, and anonymity areas. Violations of these three areas could result in negative social implications and discredit the researcher and -/- or the university. This requires a paradigm change in the way mentors and protégés interface.

Lastly, an increased awareness of the importance of properly structuring formal mentoring programs was realized. This included choices such as whether an informal mentoring program can be more efficient and productive than a formal program. Clearly defined goals and objectives for future and existing programs was also obtained. Lastly, study results taught program managers to accurately define responsibilities and even
develop a training syllabus to augment projects for both the mentor and protégé. Kasprism et al. (2008) suggested abandoning past attempts at typical mentor/protégé mentoring, and instead find new ways of training, beginning with the protégé. Age was another consideration for implementing or improving a mentoring program. The stigmata of how some people are too old to be a mentor or protégé should be abandoned. Finkelstein and Rhoton (2003) provided strong evidence that age was a strong predictor of how successful a mentoring relationship can be.

Mentoring is a continuous process, according to Allen et al. (2006), and its success and failure can be attributed to employing concepts from other organizations and contexts. Udeh and Omar (2009) added an additional dimension to mentoring and classified it as both continuous and intermittent, defining the latter as infrequent meetings in the dyad. In the context of the present study, the collaboration between military members and external organizations linked successful program traits to those programs that need restructuring. Furthermore, Rolfe (2011) noted that mentoring should tie strategies to organization objectives and goals. This will eliminate unnecessary and redundant training that will not benefit the protégé. Lastly, sailors exposed to mentoring bring new experiences to the community. Sailors with great success in mentoring may wish to continue the practice into communities other than the military.

Summary

The main goal of this study was to examine U.S. Navy protégé perceptions of the formal mentoring program they are mandated to participate in regardless of their rank in
their respective squadrons. The formal program was designed around a loosely translated concept of what senior Navy leaders wanted in a mentoring program (NPC, 2009).

Kram’s mentoring model theory guided this study in examining 10 independent variables. Despite the possibility of unreturned or altered test instruments, I provided an alternative view of formal mentoring from a military member's perspective. The significance of the study is that it provided a greater understanding of the benefits and complications of formal mentoring practices, while at the same time providing credible data to program managers and mentors alike. This increased understanding of the variables involved allowed mentors and protégés to develop a better understanding of the program and take full advantage of the benefits it offers. This information was a critical link to properly structuring future military and community based mentoring programs.

Chapter 2 provides a review of the literature in the various fields of mentoring, including personal and virtual mentoring techniques. In this chapter, I discuss the most common independent factors that affect the mentoring process. Chapter 3 addresses the methodology chosen for this study, as well as the design and implementation of the Likert survey test instrument. The target population, statistical tests, data collection and analysis will also be discussed. Chapter 4 shows the data analysis using SPSS version 18 statistical software as well as the key results. In chapter 5, I summarize the findings and conclusions, indicating how the results maybe applied to various mentoring contexts for future research in this field.
Chapter 2: Literature Review

Introduction

The origins of mentoring can be traced back to the myth of Odyssey and the training of his son by a servant named Mentor (Bierema & Hill, 2005). Although mentoring training has since evolved and is different in the current society, the principle is still the same. Current researchers have defined a mentor as a person with a compilation of parenting and peer skills who shares enthusiasm and passion in his/her field (Brewerton, 2002). Over the years, the concept of mentoring has taken on different meanings and has been used in various contexts. Despite being a lesser known field, mentoring has received recognition as a way to enhance the career, psychosocial, and personal potential of an individual (Fowler & O’Gorman, 2005) along with increased efficiency and competitiveness of organizations (O’Neill, 2005). Still, other scholars (Haggard, Dougherty, Turban, & Wilbanks, 2011; Mertz, 2004) argued about the exact definition of mentoring and how to distinguish it from other forms of leadership. Several researchers (Barak & Hasin, 2009; Thomson & Zand, 2010) have tried to analyze mentoring relationships in different contexts to determine their effectiveness when acted upon by external independent variables.

Despite collective efforts by researchers to examine mentoring from different perspectives, there remains ambiguity in many areas, including whether formal mentoring programs are more successful than informal programs at developing and supporting protégés. Haggard et al. (2011) reported that, from 2005 to 2011, formal mentoring programs have generated the greatest amount of research into this discipline. Previous
studies (Chao, 2009; Ehrich, Hansford, & Tennent, 2004) examined formal mentoring programs and reported cause and effect relationships among variables, while other studies (Darling, Bogar, Cavell, Murphy, & Sanchez, 2006; Finkelstein, Allen, & Rhoton, 2003) examined the aspects of informal programs. However, what was deficient and unaccounted for in the literature was the perspective protégés have on their programs and mentoring experience.

Identifying study independent variables was a major strategy for locating relevant and related literature. Emphasis was placed on keyword searches in various Walden University library databases as well as the Library of Congress (LOC). These keywords included mentoring, protégé, mentee, mentor, and coaching. A wide variety of mentoring literature sources was thus identified, but further classifying was needed to narrow the results. Ultimately, it was found to be more efficient to combine the 10 independent variables used in this study in the keyword search. This action resulted in literature from past studies that included all 10 variables, as well as providing alternative perspectives from various contexts.

A common theme among the literature sources was the use of various theories to explain the discipline of mentoring. Fowler and O’Gorman (2005) used Kram’s (1983) theory to explain nine mentoring functions and how the independent variables are related or affect the outcome variable, while Finkelstein et al. (2003) used Lawrence’s organizational theory of age to examine the effects of age on mentoring dyads. Other researchers (Williams, 2009) used William’s pyramid theory to examine the building blocks of mentoring programs compiled from literature and previous research studies.
By far the most commonly employed and cited mentoring theory was Kram’s mentor role model, which outlines career and psychosocial support as the two main mentoring functions. Kram’s groundbreaking research into the various aspects of mentoring has set a precedent for future researchers to follow. Quantitative studies of mentoring dyads (Egan, 2005; Feeney & Bozeman, 2008) have tested Kram’s theory against their own independent variables with similar outcomes.

The literature review commences by describing Kram’s mentor role model theory for guiding the study. It was important to understand the breadth and depth of this theory and its application to this study’s independent variables. The subsequent literature review includes a mixture of qualitative, quantitative, and mixed-method studies. The intention to use studies different from this one stemmed from the fact that similar independent variables are examined in a wide variety of contexts using diverse populations. This approach allowed for the testing of different variables under varying conditions.

**Summary of Kram’s Mentor Role Model Theory**

The most common theory employed by prior researchers in the field of mentoring was developed by Kram. The groundbreaking research on the phases of mentoring (Kram, 1983) has been instrumental and was often duplicated in later studies by Haggard et al. (2011), Thomas, Hu, Gewin, Bingham, and Yanchus (2005), and Satter and Russ (2007).

Some researchers, such as Bozeman and Feeney (2007), pointed out that only recently has mentoring research been given considerable consideration and interest, citing
Kram as one of the founders of this movement. The focus of Kram's (1983) work centered on mentoring young adults early in their careers and throughout their middle adulthood. Kram’s mentoring model focused on the needs of both the mentor and the protégé and stated that the dyad can gain significant benefits in terms of career and psychosocial support from the relationship. Kram contended that the young adult, or protégé, will seek out relationships with an older, more experienced person, the mentor, to resolve problems and solicit advice. These roles may be reversed in cases where the mentoring program is formal and a mentor is automatically assigned. Kram stated, “Entering a developmental relationship with a young adult provides an opportunity at midlife to redirect one’s energies” (p. 609). This implied that mentoring young adults can allow for the channeling of information and wisdom when individuals become middle-aged or senior adults. There was also the possibility that mentor and protégés may influence each other during the relationship (Chium-Lo & Ramayah, 2011). What was instrumental about Kram’s work was the development of five career functions and four psychosocial functions. These functions have been tested in numerous qualitative and quantitative studies (Bozeman & Feeney, 2008; Lyons & Oppler, 2004) with similar outcomes across all variables. Some psychosocial functions, such as friendship and counseling, often carry over into other fields and organizations, such as the military (Pellegrini & Scandura, 2005). Lastly, Kram recognized four phases of the mentoring relationship, namely (a) initiation, (b) cultivation, (c) separation, and (d) redefinition phases. Each phase was characterized as crucial for relationship development, but Kram did not provide exact definitions of each stage. Therefore, researchers should use their
best judgment when interpreting data from their studies (Bozeman & Feeney, 2007). Other researchers (Healy & Welchert, 1990) reported that the dyad might pass through similar phases, such as mutual admiration, development, disillusionment, parting, and transformation. Although the phrasing and arrangement of terms are dissimilar to Kram’s phases, the concept of the mentoring relationship was the same.

**Dyad Compatibility**

Review of the extant literature suggested that compatibility between mentor and protégé on a one-on-one basis plays a significant role in the success of a mentoring program (Udeh & Omar, 2009). Okurame (2008) found that protégés had a preference for mentors in their programs, even though they might be matched with a mentor of dissimilar beliefs, objectives, and interests. Carefully matching the mentor and protégé in areas such as hobbies, personal interests, job assignments, and career expectations had profound effects in both formal and informal mentoring settings (Kram, 1983). Other research efforts have found the grade level, personality, and content level to be equally important in the relationship (Wallace, 2009). Kram (1983) explained that a mentoring relationship is modeled after an individual’s needs and organizational context, indicating that it did not matter whether mentoring is formal or informal, as long as it is structured to enhance the relationship. However, Kram failed to elaborate on ways to enhance or improve the relationship. This may be partly due to the infinite number of relationship circumstances that may exist. Emmerik (2008) mimicked this view and pointed out that multiple dyadic relationships are often the catalyst for success in mentoring programs. Moreover, a study on mentoring matching conducted by Southern (2007) relied heavily
upon Haberman’s work of communicative learning, in which mutual comprehension, shared values, truthfulness, and trust exist between mentor and protégé. According to Rekina and Ganesh (2012), mentors should know the protégés’ goals and aspirations in the beginning phases to ensure that compatibility would not be a problem. Southern found that mentoring relationships that shared similar perspectives were often more successful. Additionally, Healy and Welchert (1990) stated, “protégés become living transmitters of their mentors artistry” (p. 18). In other words, a protégé can be easily influenced by the mentor’s actions, behaviors, and advice.

A study conducted by Ehrich et al. (2004) indicated that organizations should ensure the mentor and protégé are matched at all costs. The authors found that in 12.6% of the cases, personal mismatch was the most common mentoring outcome problem. Similarly, Ehrich et al. stated that the matching of mentor and protégé in formal environments is one of the most demanding tasks organization administrators face. Dysfunctional relationships can often occur in formal programs when participants are forced into a relationship (Siegal et al., 2011). Informal mentoring programs, on the other hand, proved to be less time consuming because of the mentors’ and protégés’ initiative to locate each other. Siegal et al. (2011) pointed out that informal mentoring is motivated by the needs of the two parties. Kim and Egan (2011) further stated that success in a dyad depends on early-perceived connections between mentor and protégé. These connections can be attained only by correct matching or compatibility (Wilson, 2010).
Finkelstein et al. (2003) argued that age might be a decisive factor in the matching process. They postulated that no established age gap between mentor and protégé exist, but a good starting point should be 8 to 15 years difference in age. Haines (2003), however, recommended that mentors should be at least 15 to 20 years older than the protégé. This would eliminate the possibility of the dyad being peers or friends. Finkelstein’s study indicated that the age independent variable was significant between mentor and protégé, which increased psychosocial mentoring functions. Most notably, the age difference variable was highly correlated with both mentor and protégé ages.

Other research into compatibility (Haines, 2003) has revealed that dyads that are forced into a mentoring relationship are unlikely to succeed. This was a characteristic most often found in formal mentoring relationships. Wilks (2008) referred to this as in-group and out-group relationships in which participants share common beliefs and correspond with others who they feel belong to their genera. Haines stated the dyad must have common interests in a wide variety of topics. Having similar characteristics in the relationship could be considered “falling in love” (p. 4). Similarly, Haggard et al. (2011) defined this as intimacy between the mentor and protégé. Their investigation of previous studies indicated that intimacy was the most common function absent from the relationship. Still, other researchers (Bierema & Hill, 2005) claimed that mentoring relationships may be more beneficial when they develop naturally with mutuality and chemistry present, traits normally associated with informal programs. Goals may be easier to obtain when compatibility exists in the relationship (Rolfe, 2011). Rapport and trust were also found to be beneficial to relationship cohesion (Diagne, 2008).
Technology mediums, such as the Internet and e-mail, may increase the possibility of carefully matching a mentor to a protégé. Bierema and Hill (2005) advocated heavily for virtual mentoring, whereby a protégé seeks out a mentor with similar values and interests by using electronic sources, such as the Internet and e-mail. This approach was most commonly be used in informal settings. Past research (Kasprisim, Single, Single, Ferrier, & Muller, 2008) into areas such as electronic mentoring revealed mentoring program managers should closely consider factors, such as (a) meeting frequency, (b) outcomes, and (c) various modes of communication, when matching a mentor to a protégé. These considerations were just suggestions, since program managers may have their own specific outcomes and objectives they wish to achieve.

Another important characteristic to understand in mentoring matching was the diversity of the mentors and protégés in the relationship. This diversity was a result of using multiple mentors with different views and perspectives (Carvin, 2011). Ethnicity played a pivotal role in the mentor/protégé matching process and should be taken under consideration when implementing a program. Knouse (2000) reported that the U.S. military is the largest and most diverse organization in the world. This diverse group of individuals may carry different values and beliefs that are in conflict and, therefore, the relationship may incur setbacks and obstacles as a result. Johnson and Ridley (2004) pointed out that, when mentoring involves different races, the differences between mentor and protégé become more apparent and pronounced. The authors referred to incompatibility as a mixture of “oil and water” (p. 64) that can hinder any chance of a
relationship flourishing. Cassavant and Cherkowski (2001) agreed that professional and personal incompatibility was often a major limitation of mentoring. In addition, Grogan and Crow (2004) contended that mismatching can contribute to ideological differences. For these reasons, it was expected the quality of the U.S. Navy’s mentoring program can be attributed to correctly matching a mentor to a protégé. This indicated that mentoring program managers should fully evaluate their program needs and expectations before implementing a program.

Whether the mentoring program uses face-to-face dialogue or electronic mediums, compatibility appeared to be crucial in the development and sustainability of relationships. U.S. Navy members are assigned by mandates (NAVPERSCOMINST 5300.1, 2009) to assume the position and responsibilities as a mentor, but the question as to whether they possess the necessary training remains unanswered. Need for proper mentor training is a reoccurring theme in the literature and studies have shown that, with professional mentoring training, mentors can realize benefits, such as an increase in power base, rejuvenation (O’Neill, 2005), and professional confidence (Johnson & Andersen, 2010).

**Mentor Training**

It stands to reason that, if a mentoring relationship is to grow, there should be adequate knowledge of the mentor program itself. Findings of established mentor relationship studies (Carvin, 2011; Chao, 2009; Mincemoyer & Thomson, 1998) indicated that the protégés want their mentors to be more knowledgeable on their mentoring duties, as well as be versed on organizational standard operating procedures.
Mincemoyer and Thomson (1998) elaborated further and stated that the most common traits protégés looked for in their mentor with respect to training was mentoring program knowledge and extensive knowledge of the organization they are attached to. This may be a problem when the relationship occurs in a formal setting and the mentor is forced to assume the position with no training or understanding of the duties he or she is required to perform. Udeh and Omar (2009) noted that mentoring works efficiently when both mentor and protégé are fully prepared for the relationship. This can be accomplished by proper training, according to Rolfe (2008), and such training should not just occur in the beginning phases of the relationship, but, rather, should be continuous throughout the entire mentoring process. Knowledge of the organization, but not the mentor program, was different in situations where the mentor was the protégé’s immediate supervisor. Bozeman and Feeney (2007) provided a different perspective of the supervisory relationship, stating, “Though bosses should qualify as mentors, mentoring is not synonymous with a good relationship with one’s boss” (p. 726). This meant that assuming a supervisory role does not entitle the individual to predicate the position as a knowledgeable mentor. Thus, a conflict of interest could exist in the dyad. In addition, Wallace (2009) postulated that the supervisor’s role in the relationship could be more of a facilitator of an induction process, instead of mentoring. Induction involves beginning professional development, which simply requires the supervisor to provide training to the protégé, needed to perform his or her daily tasks in the job performance. This could not be considered mentoring on any level.
Sullivan (1993) undertook a study into military mentoring that examined the role of gender differences in mentoring relationships. This involved identifying four organizational functions that have a significant impact on mentoring. According to Sullivan, the most important function was the preparation of the leaders or mentors. Sullivan reported that in 25% of the cases the protégés indicated a mentor’s knowledge and specific skill set important for satisfactory mentoring functions to occur. Moreover, 32% identified the mentor’s work experience as important. According to Weinberg and Lankau (2010), the mentor should decide how many mentoring functions would take place in a typical relationship and it is the mentor’s responsibility to ensure that knowledge is continuously disclosed to the protégé as well. This knowledge may be questionable as it pertained to the mentoring effort. One question that surfaced was whether other mentors or some professional agency external to the mentor has provided the necessary training. A meta analysis by Ehrich et al. (2004) revealed that poor planning in formal mentoring program development led to a mentors’ lack of completely understanding the mentoring role, or what was expected of them (Brewerton, 2002). Ehrich et al. reported that the lack of professional training was a mentor-related problem in 15.1% of the cases reviewed. Moseley and Davies (2007) reported that most mentors exhibited positive attitude towards their duties, even though training was an issue. These positive attitudes may be attributed to self worth in knowing they are helping develop a junior protégé. Rekina and Ganesh (2012) followed this up and pointed out that mentors often learn from the mentoring process as it helps increase their leadership, interpersonal
skills, and communication techniques. In some cases, self-confidence was also increased (Zachary, 2012).

In order to understand if mentor training was a factor in the relationship development, mentoring constructs must be taken into consideration when examining the protégé perceptions. Pellegrini and Scandura (2005) explored this realm and found that marginal mentoring relationships occurred when mentors did not meet protégé needs in terms of experience and training. Some researchers (Kasprism et al., 2008) have even proposed constructs of shifting the training from mentor to protégé with the aim of improving mentoring relationships. Their study findings showed marginal success in training protégés versus. mentors in a mandated or formal setting. However, it was not indicated whether the findings pertained to formal or informal programs. However, this paradigm shift in training could meet resistance in formal mentoring contexts where the protégé was considered junior in an organization.

The literature has supported the construct that mentor training played an important part in the relationship. The U.S. Navy’s mentoring program mandated that all sailors should participate in mentoring programs at their respective commands (NAVPERSCOMINST 5300.1, 2009). In other words, sailors are expected to fulfill dual roles as both a mentor to junior personnel and a protégé to members in service grades above them. This may cause incongruity in their behaviors and lead sailors to wonder if they are truly qualified to mentor someone else. This duality in responsibilities and duties may have created an impasse for program participants, which in turn may lead participants to question where their loyalty lies, to the protégé or the mentor.
If mentor and protégé engaged in role behaviors that are perceived to be beneficial to each other, a more enlightening relationship was likely to develop (Young & Perrere, 2000). This can only be accomplished if the dyad clearly knows what is expected of each other in terms of responsibilities. This process starts by establishing mentor training that is relevant to sustaining the relationship. It was clear that a well-structured mentoring program should take into consideration the training requirements of those expected to fill the mentoring roles. Simply appointing individuals to mentor positions, as is the case in formal contexts, will only lead to miscommunication and failure in the career and psychosocial mentoring functions. This breakdown could also be attributed to the context under which the relationship occurs. In this sense, geography played a major part in the relationship.

**Dyad Geography**

Past research efforts into understanding formal mentoring programs (Creswell, 2009; Darling et al., 2006; Finkelstein et al., 2003; Healy & Welchert, 1990) have provided considerable insight in the career and psychosocial functions of mentoring. However, little research has been advanced into how geography plays a role in mentoring. Geography, in this sense, relates to the contexts or physical locations under which the relationship takes place, the vast distances between mentor and protégé, and the means by which the mentor and protégé communicate. Haggard et al. (2011) indicated that the occupational context plays a part in mentoring outcomes, whether the relationship is formal or informal. Some researchers, such as Crutcher (2007), noted that the trend of mentoring across cultures is just the start of new techniques on mentoring.
Crutcher’s work examined how cultural differences that cross ethical boundaries may inhibit the relationship from succeeding or enduring. These cultural differences may occur in different contexts, such as different countries or different types of organizations. There is also the possibility of having a shortage of mentors in an organization. Carvin (2011) pointed out that group mentoring could alleviate mentor shortages and still provide profound effects and long lasting results by spreading mentors across a large group of participants. Confidentiality can still be obtained, according to Carvin, by placing the mentor in the capacity of a facilitator or guide, instead of an instructor. The mentor’s professional position in an organization also plays an important part in the relationship’s overall structure (Allen et al., 2006). The authors suggested that mentors external to the protégés’ department may provide increased career-related functions, such as challenging job assignments, visibility, and exposure. Barak and Hasin (2009) observed that when mentors and protégés relocated from one context to another, they had to modify their behaviors to meet the organization’s norms and adopt their perspectives to the new environments. This may present problems, as discussed by Knouse (2000), as the values and beliefs of the protégé maybe in a conflicting role with the organization.

Other geographical areas were explored by O’Neil (2005), whereby organizational context becomes a factor. O’Neil found that organizations that foster a positive atmosphere were more conducive to mentoring compared to organizations that were negative in their views and actions. O’Neil refers to these organizations as possessing both a cooperative and competitive context. Cooperative organizations project a team-centered behavior and image, whereby relationships are built in order to
accomplish goals and objectives. In contrast, a competitive organization encourages competition and turns all tasks into “A contest and never appears to lose” attitude (p. 444). Crutcher and O’Neil’s approaches have shed light on how organization geography affects the mentor and protégé’s relationship regardless of the approach taken. Still, other researchers such as Casavant and Cherkowski (2001), suggested that long distances between the mentor and protégé might create barriers to progress, making any amount of face-to-face contact time impossible.

New communication technologies have advanced the ability for the mentor and protégé to interface despite the great distance between them. These improvements can be attributed to access in the electronic mail and Internet mediums. Whiting and Janasz (2004) and Diagne (2008) examined the Internet approach and found that vast geographical distances can be overcome simply by having the dyad interface at selected dates and times online. This arrangement overcomes the time constraint barrier that affects mentors and protégés who may have busy or conflicting schedules. In a study conducted by Hamilton (2008), comfort was the most common dimension favored by mentors and protégés using Internet mentoring as it allowed the dyad to communicate at their leisure. Bierema and Hill (2005) conducted similar research into this area and defined mentoring in this fashion as virtual mentoring. Their research efforts into overcoming geographical distances between the dyad using electronic sources has become an indisputable alternative compared to traditional face-to-face encounters. Using e-mail as an electronic source provides the mentor the ability to respond immediately on protégé ideas as well as quickly disseminate information (Brewerton,
Bierema and Hill (2005) argued that traditional ways of learning are becoming obsolete because of organization globalization and technological advances (p. 563). Organizations such as U.S. Navy aviation squadrons may be operating in high tempo operations or hostile regions around the globe that make mentoring opportunities difficult to achieve. This would include U.S. Navy sailors stationed on submarines or special forces units operating in less than ideal conditions for mentoring.

Aside from organizational efforts and virtual mentoring techniques, external mentors outside of a protégé’s organization may have a profound impact on the relationship. This involves networking techniques to reach external mentors. Pfeffer (1981, as cited in Kirchmeyer, 2005) pointed out that a protégé’s contacts are important for the career advancement function, regardless of whether the context is formal or informal. Haggard et al. (2011) reported that protégés considered internal versus external mentoring as an important boundary condition for the relationship. Their findings indicated that external mentors were unlikely to detect negative mentoring activities due to geographical remoteness of the protégé. This reasoning is valid as external mentors cannot readily observe and direct protégés in their day-to-day engagements.

Previous researchers have touched briefly on the dynamics of geography and how it may affect the protégés’ perceptions of the mentoring program. Hamilton (2008) noted that a lack of an assessment tool to measure electronic mentoring would be a problem in future research efforts. It has been suggested that career functions can be improved by utilizing external mentors (Whiting & Janasz, 2004). Research has shown that networking and organizational position of the mentor can enhance the relationship as well.
The proliferation of networking techniques and technologies has greatly increased the ability to mentor across immeasurable distances. This capability may be paramount in providing fundamental mentoring functions that stimulate growth and stability in the relationship.

**Mentoring Functions**

Kram’s (1983) findings on mentoring functions have been widely used in formal (Burris et al., 2006) and informal (Jacobi, 1991; Satter & Russ, 2007) studies. Kram's identification of two mentoring functions, career and psychosocial support, has set precedence for future research efforts into mentoring activities. Kram identified career functions as coaching, protection, challenging job assignments, exposure and visibility, and sponsorship for the protégé. Burris et al. (2006) referred to these functions as the ability to increase a protégé’s chances for advancement in an organization. Kram’s psychosocial support functions were labeled as friendship, counseling, role modeling, and acceptance. Additional psychosocial support functions, such as advice and feedback, was also conceptualized (Ehrich et al., 2004). The study by Ehrich and colleagues provided an interesting statistic in that 42% of protégés reported the psychosocial functions of friendship, counseling, empathy, and support as the most positive outcome of mentoring. Siegal et al. (2011) found that informal mentoring, when compared to formal approaches, enhanced personal or psychosocial relationships function more. O’Neil (2005) gave merit to the positive potential of mentoring functions by stating that intense research efforts could increase our understanding of the mentoring relationship.
Research efforts into mentoring activities have steadily increased in the past 20 years (Pellegrini & Scandura, 2005). Brewerton (2002) proclaimed that, although the initial movement of mentoring dates back to 1970s, it was not until the 1990s that research interest became more common among political scientists. Kirchmeyer (2005) reported that the amount of literature in the field of mentoring has proliferated to over 1500 articles in the past 20 years alone. In addition to these functions, Jacobi (1991) argued that mentoring has received considerable attention in the fields of psychology, management, and education. Jacobi also mentioned that in the databases such as the Education Resources Information Center (ERIC), the number of mentoring reference materials has increased from 10 in 1978 to over 492 in 1989. This indicated that mentoring functions are widely recognized as important to the dyad and organization.

The relationship between career and psychosocial functions was more pronounced in a study by Sosik and Godshalk (2000) in which career functions were highly correlated with mentor effectiveness. Effectiveness was defined as the ability of the mentor to provide challenging job assignments and visibility opportunities for the protégé. Okurame (2008) discovered that a large majority of respondents in his study preferred more career-related benefits from the mentoring experience. In an earlier study by Sosik and Godshalk, the same career function variables were found to be highly correlated with job satisfaction. These results, though stemming from two different types of studies, were concurrent with Kram’s model of how effective mentoring can influence the career support function. Additionally, O’Neil (2005) suggested that career related functions often have a more profound effect on career advancement than psychosocial related
functions. O’Neil identified role modeling as a third mentoring function in relation to Kram’s career and psychosocial functions. Role modeling encompassed behavioral patterns exhibited by the mentor and can be construed as a way to improve both career and psychosocial functions. Kirchmeyer (2011) on the other hand, perceived role modeling as more of a psychosocial activity in the relationship.

Fowler and O’Gorman (2005) examined the mentors’ and protégés’ perceptions of their relationship. Their study examined eight of Kram’s functions, indicating that psychosocial functions often led to an increase in self-worth, effectiveness, and competence in both the mentor and the protégé. Additionally, protégés promulgated that psychosocial functions were the most important in the development and sustainment of the relationship compared to career functions (Okurame, 2008; Pellegrini & Scandura, 2005). Perceptions of the dyad were also studied by Young and Perrewe (2000), whose findings indicated that trust and effectiveness in the relationship could be obtained when both the mentor and the protégé exhibited high levels of career and psychosocial support. This indicated the mentors and protégés have a reciprocal behavior towards each other.

The mentor ultimately decided how much mentoring would take place (Rolfe, 2011; Weinberg & Lankau, 2010). This involved detailed planning on the mentor’s part. Sometimes the organization itself would dictate what functions and activities would take place in the dyad (Siegal et al., 2011). Wallace (2009) found that planning for mentoring functions was a common negative theme among protégés and was often essential to sustaining the relationship. Mentoring was found to manipulate relationship outcomes, such as learning outcomes, protégé change, and overall satisfaction (Egan, 2005). Egan
explained that the high and low levels of learning goal orientation (LGO) had a profound
effect on the relationship itself. Egan found that dyads who possessed high levels of
LGO shared increased aspirations and commitment to obtaining goals and objectives.
High LGO was also found to increase the compatibility between the mentor and the
protégé, which, according to (Kram, 1983), is a critical component in a successful
relationship. A similar concept to LGO was proposed by Chun, Litzky, Sosik, Bechtold,
and Godshalk (2010), whereby emotional intelligence on the mentor’s part
complemented the trust on behalf of the protégé. Additionally, Chun et al. (2010)
defined emotional intelligence as “The ability to effectively use emotional information in
reasoning and behavior” (p. 422). Analysis conducted as a part of their study revealed
that when emotional intelligence was the highest, coupled with a wide range of career
and psychosocial functions, protégés were more willing to participate and even consider
mentoring others outside of the workplace. Further work by Kim and Egan (2011) also
revealed that written contracts and detailed planning between mentors and protégés was
undesirable. In addition, and goals and objectives were often missing in the relationship.

In a study of mentoring literature, Jacobi (1991) listed 15 mentoring functions
most commonly recognized in dyads. Career functions (training and sponsorship), along
with the psychosocial functions (guidance and acceptance), were the most cited functions
by mentoring researchers. Other functions, such as training, acquisition of knowledge,
socialization, social status, information, goals, and bureaucracy, were not examined by
Kram (1983), but were common among the remaining researchers. This indicated that,
even though Kram’s mentor model was important to mentoring research, other functions
played an equally important role as well. Research suggested that in order to increase the likelihood of achieving career functions, such as visibility and exposure, protégés may have to take a proactive stance and rely on peer mentoring as an alternative to the traditional mentor/protégé interaction (Thomas et al., 2005). This required organizations to train all employees in formal and informal mentoring practices wherever possible. This often required using collectivism as a way of centralized control (Darling et al., 2006).

Sponsorship, a typical career function outlined by Kram (1983), was also explained with greater depth and placed into action by requiring organizations to establish sponsorship programs (Knouse, Smith, Smith, & Webb, 2000). Knouse et al. provided a good example in military contexts whereby the protégé was assigned a “surrogate mentor” by senior personnel (p. 2). This approach provided the visibility and exposure needed when transferring into a new military command. Alternatively, the dyad attended military activities such as counseling sessions, disciplinary review boards, and evaluation debriefings, which increased the sponsorship career function (NAFMISWAINST 1700.1, 2009). Although role modeling was not listed or defined as a mentor function by Kram (1983), according to Haines (2003), it encompassed five mentoring functions on the mentor’s part. These included counseling, sponsoring, encouraging, teaching, and befriending. O’Neill (2005), however, did not describe mentoring functions in relation to role modeling. Similar to Kram’s nine mentoring functions, only befriending was different in that it was synonymous with Kram’s third phase of mentoring, the separation phase.
A common theme that emerged in the literature was how to distinguish mentoring relationships from everyday supervisory tasks. In a study of formal mentoring practices in the U.S. military, Johnson and Andersen (2010) noted that as formal mentoring programs increase in the military, senior leaders will have considerable trouble separating functions such as counseling, coaching, and sponsorship from duties normally assigned to managers and supervisors. Bozeman and Feeney (2007) viewed this problem in the same sense and stated mentoring functions should be disconnected from normal supervisory activities even if the supervisor is considered admirable. These viewpoints took into account that certain functions may imbricate. According to Knouse et al. (2000), in the U.S. Marine Corps, the protégé’s immediate supervisor was usually assigned as his or her mentor. This was in stark contrast to the U.S. Navy’s program (NAVPERSCOMINST 5300.1, 2009), which stated the mentor must reside in a separate department from the protégé. Secondary mentors, however, may be authorized to mentor protégés in their own department with no restrictions (MISAWA Instruction 1700.1, 2009). This U.S. Navy instruction authorized individual commands to have alternate mentors. However, the primary mentor for the protégé must not be in the protégé’s immediate chain of command. This may be construed as an overlap in the program. Haggard et al. (2011) acknowledged that overlap conditions do occur between mentoring and developmental contexts. They cited coach-client, supervisor-subordinate, and teacher-student relationships as examples. Despite the benefits mentoring functions bring to a relationship, some mentoring outcomes and effects may not be realized for years to come (Kirchmeyer, 2011). This does not, however, imply that the functions are not important
now, during the cultivation of the relationship. Still, it is equally important to recognize when the relationship is over, i.e., the mentor and the protégé should go their separate ways (Udeh & Omar, 2009). The dyad should also have a clear consensus of knowing when the relationship is not meeting their needs and expectations. Lastly, success should be measured to ensure the mentoring effort is meeting the needs of both the mentor and the protégé. According to Carvin (2011), both qualitative and quantitative surveys should be used as a feedback tool for the participants. Kram’s (1985, 1983) career and psychosocial functions, as well as functions brought to light by other researchers, were equally important to the dyad. Other independent variables such as the mentor’s and protégé’s gender played a decisive role in the relationship and should be examined for its outcome effects.

**Mentor/Protégé Gender**

The independent variable gender played an important role in the relationship. However, there was paucity of research performed to determine whether males or females are better at assuming a mentor position. Very little research according to Darling et al. (2006) has been undertaken to understand gender differences in mentoring relationships. The first such attempt was the study conducted by Sullivan (1993) in which she sought to understand gender differences in military mentoring contexts. Sullivan’s study addressed gender differences between the mentor and protégé as well as the differences in gender between minority mixed dyads. The study findings showed an increase in relationships developed when a male mentor assumed the role. Moreover, female protégés received fewer mentoring opportunities compared to their male
counterparts. This trend was prevalent in most military contexts Sullivan examined, but the causes for this inequality were not addressed. Other studies (Okurame, 2008) indicated that gender role stereotypes were prevalent and played an important role in fostering mentoring relationships. Okurame reported cross-gender mentoring as a major challenge in the cohesion of the relationship. Other researchers (Wilks, 2008) found that a self-fulfilling prophecy exists when participants act in line with the stereotypes.

Kram’s (1983) study found significant limitations concerning cross-gender mentoring opportunities. Respondents in her study, mostly female, often sought out other female peers to act as mentors. This occurred because of similar gender characteristics that were common in female-to-female dyads. In a longitudinal study by Weinberg and Lankau (2010), it was found that female mentors who were matched with female protégés were more satisfied with the mentoring relationship. Interaction plots from the study suggested that vocational support for same-sex dyads doubled when more hours were spent together. Psychosocial plots also indicated a significant increase when cross gender relationships occurred. Interestingly, from a mentor’s perspective, female mentors reported greater mentoring satisfaction when paired with someone of the same sex. According to Young and Perrewe (2000), an increase in career and psychosocial functions was not the most preeminent answer if each partner in the dyad does not receive adequate reciprocal support. This was attributed to the amount of trust that was built into the relationship.

Perhaps the most comprehensive research strategy aimed at understanding gender differences belonged to McNamara et al. (2008), who conducted an inquiry into
understanding the barriers that prevented relationships from developing. McNamara et al. cited multiple barriers for both mentors and protégés of different gender. Male protégés pointed out networking, friendship, and similar interests as major obstacles in locating a mentor while female protégés were more inclined to use a passive approach in finding a mentor.

Chun et al. (2010) and Diagne (2008) noted that lack of trust between mentor and protégé can leave a relationship vulnerable and the actions or behaviors of one person can adversely affect the relationship. Chun et al. went on to say that mentors who obtain a protégé’s trust feel compelled to provide increased levels of mentoring functions. Results from their study indicated a strong correlation between mentor and protégé gender with the independent variable trust as a moderator. This suggested that same-sex dyads may be more beneficial for successful mentoring. Chun et al. indicated that same-sex dyads often developed trust faster than mixed-sex dyads. Other researchers indicated that gender differences prevented protégés from exhibiting positive attitudes towards the mentoring concept (Ehrich et al., 2004).

In the field of academics, Haines (2003) found that women who were in mentoring relationships were more productive than women who refrained from such relationships. Haines reported that in some instances women with no mentors were worse off than women with mentors. This was not the female protégé’s fault according to Bierema and Hill (2005), because some female protégés had a difficult time in locating a suitable mentor. O’Brien et al. (2010) took the analysis of gender differences one step further by examining protégé’s experiences on career and psychosocial benefits. Their
work examined if both sexes received equal and quality amounts of mentoring in both
career and psychosocial areas. They postulated that career and psychosocial support
varied between the sexes and that both are equally important for the relationship. The
hypotheses tested in the study supported the fact that females tended to receive more
psychosocial support while males reported receiving more career related support.

Turban and Jones (1988, as cited in Lyons & Oppler, 2004) proclaimed that
gender was only a significant factor in the relationship when the sexes were dissimilar.
Their study findings suggested that same-sex dyads were not significantly different from
mixed-gender dyads. Crutcher (2007) shared similar views in that boundaries must be
established between males and females in the relationship in order to determine
mentoring goals and objectives. Crutcher warned researchers that females often preferred
to use intimate communication to resolve issues and problems while males preferred to
diagnose problems directly. Darling et al. (2006) characterized this as instrumental and
psychosocial learning. Instrumental learning was more problem-focused in obtaining
goals and objectives, which was normally the process used by males while females used
psychosocial learning, which was tailored to changing personal characteristics of the
protégé. A peer mentoring study by Thomas et al. (2005) shed light on the effects same-
sex mentors have on protégé productivity. Their study revealed that female and male
protégés responded the same as far as the quality of instrumental and psychosocial
functions are concerned, irrespective of whether the context was peer mentoring or
conventional mentoring.
The military operating environment presented challenges pertaining to mentoring provided to males and females. Knouse et al. (2000) described instances where females were denied the opportunity to be mentored because of their command’s operating context in hostile or combat areas. Additionally, O’Neill (2005) also emphasized an organization’s context, adding that a protégé’s position in the organization can also inhibit mentoring opportunities. O’Neill pointed out that protégés in upper-level positions tended to receive more mentoring than protégés in lower level positions. Such environments created a problem for female protégés who worked in organizations where males dominated the workforce. There were perceptions of favoritism from females who observed males in higher-level positions getting more mentoring efforts. Murrell (2007) referred to these barriers as a “Glass ceiling” (p. 1), which acted as an obstacle or limitation. Kirchmeyer (2005) argued that the gender variable in mentoring relationships might be mediated by the protégé’s political abilities, organizational context, and social skills. These ideas are commensurate with the views of Knouse (2000) and Haines (2003). This indicated that the chances of finding a mentor will increase as a protégé serves longer durations in an organization or the military (Johnson & Andersen, 2010). This correlation between length of service and mentoring opportunities impeded the ability of the protégé, regardless of his/her gender to obtain challenging job assignments. Rewarding job assignments, as noted in the next section, were unique, as they served as a tool to inspire and motivate a protégé to achieve his or her goals and objectives, regardless of whether they are career- or psychosocial-oriented.
Challenging Job Assignments

Obtaining challenging job assignments resulted in the protégé receiving higher wages, increased promotions, and expanded responsibilities (Haggard et al, 2011). Diagne (2008) advocated a protégé be exposed to a challenging work atmosphere for growth. Prior research into mentoring indicated that challenging job assignments should be viewed as a career related function (Kram, 1983). This suggested that a mentoring relationship that allowed the mentor to provide the protégé with adequate and fulfilling job assignments increased career development. This career development according to Udeh and Omar (2009), was a part of the gratuitous phase of mentoring and focused solely on the protégé. There may be increases in psychosocial skills that can be realized as well. Kram stated that the chances of this occurring was enhanced by the mentor’s position in the organization, work-related experience, and incumbency. For mentors to provide challenging job assignments, they must first affirm that the protégé is suitable to assume the position(s) (Haines, 2003). This mentor behavior according to Barak and Hasin (2010), involved knowing how to first challenge protégés and then mentor them. This view coincided with the Satter and Russ’s (2007) recommendations, whereby the mentor should alternate his or her mentoring techniques to be firm and challenging. The challenges of providing rewarding work assignments may not be so readily apparent, however, since mentoring functions may vary with the protégé’s progressive career stages (Kirchmeyer, 2005). Career stage in this case was the protégé’s organization qualification or education level.
Other research (Allen et al., 2006; Burris et al., 2006; Ehrich et al., 2004; Jacobi, 1991; Young & Perrewe, 2000) recognized challenging work assignments as an important career advancement tool. Challenging work assignments increased a protégé’s competence and reduced workplace stress (Pellegrini & Scandura, 2005) and turnovers (Weinberg & Lankau, 2010). Sullivan’s (1993) research findings indicated that 15% of participants listed challenging job assignments as important to the mentoring relationship, particularly in mixed-gender dyads. Similar results were reported by Ehrich et al. who noted that 42.1% of their study participants recognized work assignment support as a major positive outcome of the relationship. Additionally, O’Neill (2005) found significant correlations between challenging job assignments and the independent variables exposure/visibility, championing, and protection. These correlations were commonly found in organizations that functioned in a competitive context, compared to cooperative contexts.

Murrell (2009) elaborated further and stated that a mentor can often “Run interference” (p. 3) between the protégé and the organization and shield the protégé from damaging action of coworkers. Haines (2003) agreed with this view adding that a mentor can provide protection from environmental threats as well. While this seemed like an important psychosocial function, it did, however, have detrimental effects to the career-related function of rewarding job assignments. A mentor that hides or shields the protégé may be limiting the protégé’s ability to be noticed and selected for key job assignments and positions. The protégé may also have other hidden motives.
5300.1 (2009) pointed out that protégés seek out mentoring relationships to further enhance their careers, which leads to a relationship built on deceit and mistrust.

The concept of using a protégé’s supervisor as a mentor was previously discussed in this chapter. However, it should be stressed that a boundary or clear recognition of what differentiates mentoring functions from supervisory functions must be established. Bozeman and Feeney (2007, p. 726) favored using the protégé’s supervisor as a mentor because the supervisor had more face-to-face contact and generally has a firm grasp of key work assignments that may be beneficial for advancement. The mentor’s knowledge of the organization also played a pivotal role in identifying challenging work assignments. Mincemoyer and Thomson (1998) identified organizational knowledge as highly important for the relationship. This in-depth understanding of the workplace context enabled the mentor to select key job assignments that may be beneficial for the career development of the protégé.

Johnson and Andersen (2010) explained that mentoring relationships played only a small part in the career and psychosocial success for a protégé as other external factors often intervened in the relationship. In summary, the mentor played a major role in providing the protégé with work assignments and opportunities the protégé could not otherwise obtain. As important as challenging job assignments may be to the protégé, the mentor’s ability to get the protégé recognized in the eminence of others may be just as important.
Protégé Visibility

Goodyear (2006) defined visibility as an “Opportunity to engage in activities that expose others to the person’s skill set” (¶. 4). This was interpreted as a way to display or present a protégé’s ability to perform tasks or assume duties that complemented the organization. The aspect of protégé visibility often led to enhanced career advancement opportunities (Kram, 1983) and was used as a leverage tool (Smith, 2009). Visibility or exposure assisted a protégé by expanding pathways for success. Other researchers (Southern, 2007) reiterated the concept of getting to know the protégé fully before visibility opportunities was afforded. This allowed the mentor to open pathways for transformative learning and self-awareness. Johnson and Andersen (2009) added that the devotion of strong mentors allowed non-parallel leaders to advance to the top of their respective fields. Through her research into gender mentoring issues, Price (1994) identified visibility and exposure as a way of introducing the protégé to the organizational norms and demands of his or her profession. Following a study of organizational predictors on mentoring, O’Neill (2005) reported that visibility was highly correlated with challenging job assignments as well as championing or the ability of the mentor to defend or promote the protégé. In the U.S. Navy this was accomplished by utilizing career development boards (CDB), which offered the protégés the necessary information to make their own career decisions (NAVADMIN 227/07, 2007). Senior military members of a naval command often directed these CDBs and some members may even be the protégé’s immediate supervisor. NAVADMIN 043/08 (2008, ¶. 2) pointed out these CDBs are at the core of the U.S. Navy’s retention efforts while
NAVPERSCOMINST 5300.1 (2009) listed protégés as the future of the U.S. Navy and insisted that their training enhances a military unit’s operational readiness. NAVADMIN 348/08 (2008) referred to this as finding a best fit for its sailors. In this context, fit was defined as, “Having a trained sailor, at the right place, at the right time” (p. 4). Other aspects pertaining to importance of visibility were mentioned by Wilson (2010), who noted that career paths of junior naval officers and enlisted sailors are often shaped by the visibility they receive from their mentors. U.S. Navy sailors have reported feeling disallowed or discredited when overlooked for advancement positions because of their limited visibility or exposure (Bailey, 2004).

The U.S. Air Force instruction 36.3401 (2000) emphasized a strong approach to visibility by having unit commanders and immediate supervisors take a more proactive role in the mentoring program. The U.S. Marine Corps mentoring instruction NAVMC 1500.58 (2006) on the other, hand emphasized that mentoring duties should be adhered to 24 hours a day, whether the junior marine is on or off duty. This approach was based on a visionary model of how and where the protégé fits into the unit’s mission. Like the U.S. Air Force mentoring instruction, the U.S. Marine Corps preferred to use the immediate supervisor in a mentor role (Knouse, 2000). This was contrary of the U.S. Navy’s instruction (5300.1, 2009) of using a mentor outside of the protégé’s chain of command (COC).

The outcome of quality visibility functions depended in part on demographics. Thomas et al. (2005) characterized the quality of visibility functions as dependent upon the protégé’s gender and race. Thomas et al. stated that females and minority groups
were suppressed and limited to the visibility levels below that of their male and non-minority counterparts. Darling et al. (2006) elaborated further on these concepts stating that organizations may limit visibility even further if the focus is more on instrumental (career) mentoring, which benefited males more than females.

An alternative approach to affording the protégé visibility and exposure was based on electronic means of delivery such as telementoring and Internet-based approaches. Telementoring according to Foster (1999), allowed for more flexibility in the relationship by allowing interaction between mentor and protégé when it is convenient for both. This was accomplished by using e-mails as a medium as it overcame barriers such as time constraints and vast geographical distances. Haggard et al. (2011) enunciated that visibility and networking increased from 2000 to the present. Their study included exploration of conditions such as inside versus outside mentoring opportunities. The only concern was that outside mentors were not fully recognizing the talents and potential of protégés in efforts to increase their career-related goals and objectives. Study results reported by Allen et al. (2006), however, indicated that mentors from external departments induced higher levels of mentoring satisfaction in their respective protégés. Telementoring presented problems for outside mentors in this area because the protégé were not observed on a regular basis, thus limiting the opportunities for recognizing his or her talents. A protégé with mentors inside of the organization had more network ties and provided visibility when it was more appropriate (Feeney & Bozeman, 2008). This was true regardless of whether the mentor was in the protégé’s chain of command or worked in some external department of the organization.
Additionally, Bierema and Hill (2005) observed that virtual mentoring or computer-mediated communications facilitated the mentoring relationship. In line with Foster’s (1999) findings, Bierema and Hill added that computer-based technologies reached across borders and offered mentoring options for dyads who have never met. Still the researchers agreed that it was still an exploratory science and needed further research to determine its overall effects for the protégé and the organization. In a similar demeanor, Whiting and Jamasz (2004) found the Internet to be a useful tool to locate mentors in efforts to direct protégé career paths. However, no information is given as to just how locating a suitable mentor can be accomplished. Whiting and Jamasz pointed out that critics often debate whether long-distance mentoring can provide the necessary visibility for the protégé, even though prior research studies into Internet mentoring efforts have proved successful. As Bierema and Hill stated, more studies should be undertaken to determine if visibility was improved or aggravated by monitoring via electronic means.

With adequate visibility support, the mentor also nominated the protégé for advancements (Pellegrini & Scandura, 2005) or preferable positions (Murrell, 2006). Murrell also noted that visibility functions enhanced the networking skills of the protégé.

Perhaps the most unexplained area of the visibility function was whether the protégé can gain visibility or exposure through a group context. Kram (1983, 1985) supported a dyad relationship of one-on-one contact with a member, but Bozeman and Feeney (2007) noted that more current research was supporting group mentoring. This concept allowed the protégé to develop knowledge and skills rapidly because of the inherent strength that comes from participation in large groups. A protégé that developed
visibility and exposure through the group concept learned to retract from all communications with the mentor. The concept of group mentoring, as explained by Goodyear (2006), assisted the protégé because of diversity of group members. Similar to using different mentors to gain different perspectives, group mentoring empowered the protégé with views from other protégés, but lacked the one-on-one contact normally associated with mentor/protégé dyads. Healy and Welchert (1990) found that visibility was no longer a factor in the relationship once the protégé gained confidence to present himself or herself without the aid of a mentor. Additionally, Diagne (2008) reported that in addition to providing visibility for the protégé, the mentor must ensure transparency in the mentoring program. This involved informing the protégé of the overall direction the organization was taking as well as stating the expected outcomes from mentoring.

The literature on protégé visibility and exposure revealed that career development can be enhanced if the protégé was given the opportunity to display his or her talents and skills. This was achieved if the mentor possessed the appropriate leadership characteristics such as portraying a transformational or transactional leadership style. The literature suggested that visibility and exposure may hinge on the role modeling exhibited by the protégé’s mentor(s).

**Mentor Leadership**

According to Mumford (2000, as cited in Rekina & Ganesh, 2012), mentor leadership encompassed three qualities: (a) problem-solving, (b) social judgment, and (c) knowledge. These qualities were prevalent throughout the literature search, particularly the knowledge component and played a large role in what protégés wanted in a leader.
Role modeling and leadership according to Goodyear (2006), allowed the protégé to monitor the mentor in real world settings and emulate their actions and behavior. In order to have an effective mentoring program, the mentor possessed strong leadership skills and characteristics to gain the trust and support of the protégé. This was accomplished by adopting a transformational leadership style according to Burke (2008), which included mentors who inspired change and motivation and used foresight to empower protégés to achieve goals and objectives. A transactional approach was also utilized and was characterized as a reward method whereby a leader-follower relationship was developed and an exchange of one favor for another between the dyad is the norm (Hickman, 2010). Hickman noted that these approaches stem from an understanding that leaders are not born or made. Godshalk and Sosik (2004, 2000) defined an exemplary mentor as a person who promotes career and psychosocial support by acting as a challenging and inspiring role model and leader. They explored the link between the mentor’s and protégé’s perceptions of leadership and its effects on mentoring and found a significant correlation between the mentor’s leadership style and the protégé’s rating of that particular style. They found the transformational leadership style to be more effective than transactional while overlapping characteristics from each often existed. In a study by Wilks (2008), dialectics, or learning that occurred within conversation in the relationship, was the most effective way to sustain a relationship. The most important characteristic was charisma between the mentor and protégé. Charisma was also an important attribute according to Burke (2008) in organizational change efforts. The ‘one leader one follower’ mentoring concept was recognized by Godshalk and Sosik (2004,
2000), where the mentor exerted a leadership style that was more indirect and informal. Following a review of mentoring role-modeling literature, Jacobi (1991) noted that role modeling or mentor leadership was a common theme in five out of seven studies examined. This represented the importance previous researchers have placed on this particular variable. Study results from Allen et al. (2006) showed that the variable ‘leadership traits or role modeling’ was highly correlated with career and psychosocial functions as well as the overall quality of the mentoring effort. These findings were concurrent with those of Sullivan’s (1993) study in which leadership or role modeling was rated as important by 23% of respondents. Similarly, Weinberg and Lankau (2010) found that role modeling and leadership was highly linked to vocational and psychosocial support. Again, strong leadership contributed to the overall satisfaction mentors and protégés gained from the relationship when interacting in a formal mentoring environment.

There was also a chance that mentors may not possess the necessary skills to assume a leadership role as a mentor (Ehrich et al., 2004). Ehrich et al. explained that a leader must first reflect on his or her own learning styles in order to convey information or instruct others. Brewerton (2002) declared, “A good manager should be a good mentor” (p. 371). However, Brewerton’s statement could never be confirmed by other researchers in the area of leadership. Still, Diagne (2008) noted that a mentor should possess altruism and believed that the protégé has the ability to succeed. The leadership attributes a mentor must possess stemmed from learning goal orientation (LGO). Additionally, Egan (2005) reported that mentors with high LGO had a more idealized
influence over protégés and their progress. Egan’s study results indicated that mentor LGO mediated predictor variables such as idealized influence attributes, idealized influence behavior, and desired aspirations in the relationship. Other areas of mentor leadership were explored by Chun et al. (2010) in which a mentor’s emotional intelligence increased trust in the relationship. The authors stressed that high levels of emotional trust in mentors were capable of increasing vocational and social support functions.

The learning environment also played a role in the mentor leadership abilities. Healy and Welchert (1990) stated, “An organism’s transformation depends as much upon the dynamic potentials of its context as upon its own changing capacities” (p. 17). In short, Healy and Welchert stressed that the operating context under which the relationship occurs had positive and even negative effects for the dyad. This may be the case in military units that operate in hazardous or hostile environments. Healy and Welchert go on to say that behavior transformation was not just limited to the protégé, as the mentor can transform as well.

Whiting and De Janasz (2004) stressed the importance of having more than one mentor available to the protégé. Their reasoning was that multiple mentors provided different leadership perspectives for the protégé regardless of their leadership style. If a protégé’s perspectives are closely inline with the behaviors of a mentor they respect and trust, transformational learning will occur (Southern, 2007). The mentor also served as an object of idolization when his/her behaviors and attitudes are favorable to the protégé (Pellegrini & Scandura, 2005). Thus, multiple mentors added diversity,
divergent viewpoints, and a different mindset to a relationship, but only if the mentors afford ample time to mentoring.

**Time Management**

The extant literature repeatedly highlighted the importance of mentors and protégés finding time to meet and cultivate the relationship. According to Smith (2005), time was a precious commodity in the U.S. Navy as not every mentor and protégé can stop his or her assigned duties and meet for mentoring. In some cases, a relationship that provided too much distance and inadequate meeting frequency can cause the relationship to suffer (Crutcher, 2007; Feeney & Bozeman, 2008). This was due to meeting locations that were too far away or locations that were only accessible during certain working hours (Casavant & Cherkowski, 2001). Organizational personnel was also blamed for failed mentoring programs. Quite often formal mentoring programs required the mentor and the protégé to meet frequently regardless of their work schedule or personal life commitments (Siegal et al., 2011). Rolfe (2011) noted that non-supportive personnel and managers severely hampered mentoring efforts. The mentor according to McKimm et al. (2007), must possess both organizational and interpersonal skills. One of the organizational skills important to the relationship was time management. This was found to be easily accomplished if both mentor and protégé are willing to volunteer. The problem according to McKimm et al. (2007), was finding ways to coordinate schedules for both parties.

The online aspect of mentoring was a future trend for mentors and protégés due to its convenience of arranging meeting times. Whiting and Janasz (2004) reported the dyad
could meet 15 to 20 minutes per interaction session regardless of their geographical location. Navy Personnel Command Strategic Communications (2003) recommended the dyad meet at 30, 90, 120, and 270-day intervals to conduct mentoring. At each mentoring session the dyad discussed new goals and objectives, which was important to the sailors standing in the command in terms of career development. Alternatively, Bailey (2004) recommended that mentors converse with their protégés twice a month to discuss their progress. In their study on mentoring demographics, Lyons and Oppler (2004) hypothesized that time and meeting frequencies in the dyad mediated a more satisfied relationship. Their study results supported the hypotheses and showed that mentors who met with their protégé on a daily, weekly, or monthly basis were more satisfied with the mentoring process. Additionally, Rekina and Ganesh (2012) found that regularly scheduled mentoring sessions increased protégé self-esteem, knowledge, self-awareness, and vocational aspects of the career and personal life areas.

Bierema and Hill (2005) mentioned that online or virtual mentoring was not place-dependent and in some cases was less costly to the dyad because little to no transportation is needed. Foster’s (1999) study of the Hewlett Packard Telementor Program indicated that sending correspondence through electronic mediums such as e-mails often saved considerable time and allowed current ideas and suggestions to be shared quickly between mentor and protégé. A similar online mentoring program described by Franchetti (2009) involved using the U.S. Navy’s Women E-Mentor Leadership Program, which allowed female sailors to access vast databases to increase
leadership skills, find guidance and support, and ask for general advice in their own settings at a time that is convenient to them.

Group training was another relatively new approach to spreading knowledge in mentoring programs. Emelo’s (2011) study on group mentoring found that group interaction not only saves time and resources, but it also acted as a leveraging tool for organizations short on potential mentors. His study findings indicated that 96% of the mentoring group participants could apply what they had learned at their own respective organizations. What was more appealing is that 75% of respondents said that mentoring helped them boost productivity and efficiency at their jobs. Emelo identified three improvement areas resulting from group mentoring. These included (a) increases in networking skills, (b) interpersonal effectiveness, and (c) leadership skills.

Mentoring relationships were hampered by their limited duration. Johnson and Andersen (2010) explained that mentors provided adequate career-related support due to relationships that are based on term limits. This included organizations such as military units where service members transferred or exited the service routinely. Similarly, O’Neill (2005) suggested that mentors were more compelled to provide time-critical support to protégés who were more educated and exhibited higher earning potential. This claim was not supported in the past or current literature and needed further study.

The strength of the relationship, according to Murrell (2007) was increased if the mentor and the protégé maintained continuous contact and communications, which required a time commitment. Study results reported by Weinberg and Lankau (2010) validated Murrell’s views and showed that total time spent together had a strong
correlation with both vocational and psychosocial support. The Mentor Minute (2010) listed ten activities both mentor and protégé performed to increase their mentoring frequencies. Among them having a realistic schedule and dividing large projects into smaller, more manageable parts was the most efficient approach. A critical area of the relationship occurred in the first stage or the initiation phase. Haines (2003) noted that in this phase the dyad met for the first time and began a process of getting to know each other. This phase thus pivoted on the ability of the mentor and the protégé to commit ample time to meet.

Kram (1983) mentioned the initiation phase was the area where protégés praise their mentor for finding adequate time to provide support and guidance. The initiation phase according to Kram was the most important as mentor’s and protégé’s first impressions made or broke the relationship. Seldner (1992) found similar patterns and commented that flexibility was key to mentoring and the dyad should make a firm commitment to meeting whenever free time is available. Involvement in a mentoring relationship became a question of just how much was required in terms of time and meeting frequency (Mertz, 2004). Figure 1 of Mertz’s study showed a hierarchy of career and psychological functions typically found in a mentoring relationship.
What was noteworthy was that for every increase in level, the mentor and protégé have to devote more time to accomplish each mentoring function. This implied that to reach the pinnacle of mentor, a person must devote an increasing amount of professional and personal time. This required resolving scheduling conflicts as well as generating motivation and initiative in the dyad. Lastly, the literature provided sound evidence of the importance of predictor variables on the relationship, but attention should be given to the protégé and his or her expectations pertaining to the mentoring relationship outcomes.

**Protégé Career Expectations**

Satisfaction was often seen as a leading indicator of mentoring effort quality (Emelo, 2011). A study of protégé perceptions and satisfaction on mentoring relationships (Thomson & Zand, 2010) was undertaken with the presumption that a
senior person (mentor) can impart knowledge and skills to a junior person (protégé). The authors found that if the protégé’s perceptions can be improved through friendship with the mentor, the relationship would prosper and endure. Studies by Chium-Lo and Ramayah (2011) confirmed this finding and further suggested existence of a positive relationship between career mentoring and protégé satisfaction. Additionally, Brewerton (2002) listed six mentoring perceptions most commonly noted by protégés when evaluating mentoring outcomes: These included (a) management success, (b) professional support, (c) career development, (d) specific skills, (e) new recruits, and (f) professional contacts or networking. This did not imply that all six perceptions must be present for a mentoring relationship to be successful.

Another view of the protégé’s perspective on mentoring was that not all relationships can be considered mentoring and may be viewed as simply supervisory functions that are required of the mentor (Mertz, 2004). In such cases according to Marine Corps directive 1500.58 (2006) recommendations, it was up to the protégé to determine how much guidance and counseling they will require from the mentor(s). In other words, protégés according to Crutcher (2007), “Must make their own way” (p. 23). Some critics pointed to this as a protégé’s choice to create his or her future.

Protégé expectations were falling short because of the overall structure of the program itself. Healy and Welchert (1990) listed insufficient planning and implementation of the program as a major shortcoming, which instilled little confidence in the protégés. In similar cases, Ghium-Lo and Ramayah (2011) found that protégés often looked elsewhere for satisfaction. Their study findings revealed that career
mentoring that was not properly implemented had little to no effect on overall program satisfaction. Success could thus be expected if the protégés knew what was expected of them in terms of responsibilities (Grogan & Crow, 2004). Emmerik (2008) suggested that team-level support increased satisfaction in the dyad. Emmerik defined team level support as (a) perceived support, (b) support from informal networks, and (c) support from a team orientation of the team members. Emmerik also found social exchange theory prevalent among dyads. Social exchange theory was a relationship whereby favors are exchanged between the mentor and the protégé. Other researchers such as Lyons and Oppler (2004) enunciated that the structure of the mentoring program was more important to protégés than actual demographic characteristics. A dilapidated structure often resulted in mismatching of the dyad and as previously stated in this chapter, a mismatch in the dyad caused negative perceptions (McKimm et al., 2007). Formal mentoring programs were more susceptible to structure deficiencies when compared to informal programs. Diagne (2008) confirmed this finding by stating that mentor and protégé should be allowed to quit or exit a mentoring relationship at any time. This worked for informal programs, but formal programs were often mandated and the mentor and protégé must participate irrespective of their feelings, as in the case of the U.S. Navy. Formal mentoring program research conducted by Johnson and Andersen (2010) revealed that military members were fond of mentoring, but did not want the restrictive structure associated with formal programs. This restrictive nature was echoed by many researchers (Bozeman & Feeney, 2007; Kasprism, 2008; Kram, 1983; Mincemoyer & Thomson, 1998; O’Neill, 2005; Weinberg & Lankau, 2010).
Mentoring was perceived as unfair to protégés who had no mentor. Smith (2009) stated that some U.S. Navy members might feel that favoritism exist when other protégés received more attention from their mentors. This view was reiterated by Haines (2003) in that protégés have unrealistic expectations that mentoring opportunities will expand their chances for promotions or advancements to key organization positions. This antithetical view was counter to that voiced by Satter and Russ (2007), who reported both the mentor and protégé exhibited a “what’s in it for me” (p. 384) attitude when they are not fully knowledgeable about the program and its benefits. Thus, according to Rekina and Ganesh (2012), more longitudinal studies were needed to document protégé behaviors in the beginning and end phases of the relationship. The literature has proven that protégé expectations should be taken into consideration in the overall structure of the program.

Summary

The literature search revealed an equal balance of research in both formal and informal mentoring settings. A common theme among most research efforts was the need for providing an accurate definition of mentoring. Pioneering mentoring theorists such as Kram (1983) have laid the groundwork for future endeavors into this discipline, but more comprehensive research was needed to understand the outcomes of mentoring a protégé.

Literature review also revealed that incorrect compatibility matching between mentors and protégés was detrimental to the mentoring effort and in some cases, generated more problems for the dyad. This problem was more prevalent in formal mentoring programs where organizations coerced relationships to form with little regard
to program structure. Diversity among participants also played a pivotal role and in some cases, as Knouse et al. (2000) reported, the U.S. military was the biggest offender when it came to this problem.

Lack of mentor training was a common theme and studies by Bozeman and Feeney (2007) reported that mentors rarely fully understood what was expected of them when mentoring a protégé. This led critics to proclaim that a typical supervisor may not possess the qualities necessary to perform mentoring functions. In response, many authors recommended that high quality mentor training programs be established to fulfill this role.

Mentor program geography was found to be a strong predictor of mentoring outcomes in both formal and informal programs. Conditions, such as military unit deployments, hostile operating regions, and environments that were not conducive to proper mentoring, often created problems for the relationship. Geography also affected the boundaries between cultures of various participants and made it difficult for mentors and protégés to meet on common areas. This was alleviated by using technology such as the Internet and e-mail as means of communication. Geography was a predictor variable that has received little attention from researchers and played a more significant role when mentoring program coordinators structure their own programs.

By far the most comprehensive section covered the nine mentoring functions outlined by Kram (1985, 1983). These functions were described or mentioned in nearly all literature sources reviewed, which indicated the importance researchers placed on them. Other researchers including O’Neil (2005) reported role modeling as an additional
function exhibited by the mentor. The mentor’s motivation and initiative was found to be discerning in the amount of mentoring functions provided. This suggested that the mentor should be aware that if decrepit efforts on his or her part are evident, a breakdown in the effectiveness of the program would occur.

Gender was a factor that was covered in most studies on formal and informal programs. It was suggested that female protégés received fewer mentoring opportunities than their male counterparts did. In many cases greater program success was realized when same-sex dyads were developed in comparison to mixed dyads. Same-sex dyads often facilitated a greater amount of trust, similar views, and beliefs.

Challenging job assignments were also examined in numerous studies with results indicating that the mentor should get to know the protégé fully before suggesting greater responsibilities and duties. Studies by Sullivan (1993), Weinberg and Lankau, 2010, and Ehrich et al. (2004) showed considerable favoritism from protégés concerning this variable. However, the variable failed to provide evidence that the protégé would obtain job assignments or promotions if they received challenging work assignments.

The independent variable protégé visibility was closely linked with challenging job assignments. It was thus recommended that mentors get to know the protégé on professional and personal levels before giving them the opportunity to partake in formidable work assignments. Protégé visibility was found to increase pathways for advancement and self-awareness in protégés. This view was reflected in military instructions from the U.S. Air Force (2000), U.S. Navy (2009), and U.S. Marine Corps (2006) doctrine.
Mentor leadership qualities also predicted the outcome for many mentoring programs. Many studies examined mentor leadership styles by labeling them as transformational or transactional. It was discovered the transformational approach was more effective at cultivating and sustaining the relationship. External factors such as the operating environment affected the leadership style of the mentor, whereby military units may have felt the greatest impact.

Lastly, the time management variable was examined for its effects. Many studies reported that the mentor and protégé simply could not find adequate time to meet for mentoring sessions due to conflicting schedules or vast distances between them. Such obstacles were overcome by using communication techniques such as virtual or Internet meetings. These solutions were however, viable only if the dyad was committed to the mentoring program.
Chapter 3: Research Method

**Introduction**

The purpose of this quantitative correlational research study was to fill a void in the related literature by examining the failures and inadequacies in the U.S. Navy’s formal mentoring program. I accomplished this by applying theoretical concepts used in successful programs external to the military. The study setting and population were identified to provide an understanding of the mentoring program context in military settings.

In this chapter, I provide an overview of the participant selection procedure, the survey instrument development and implementation, and the data collection process. Study research questions and hypotheses are stated and the data analytic procedures are described. This includes identifying and describing the variables for each hypothesis. Analyses aimed at understanding the relationship between the factors included (a) descriptive statistics variables in the study, (b) correlation analysis to examine the relationships between independent variables and outcomes, and (c) multiple linear regression to determine the degree to which satisfaction with mentoring can be predicted by a set of variables.

**Purpose Statement**

The purpose of undertaking this study was to examine the factors contributing to the effectiveness of military mentoring programs in formal mentoring contexts from the point of view of protégés. The protégées’ satisfaction represented a criterion for the success or failure of such programs. Several factors were examined in relation to protégé
satisfaction. These factors included (a) compatibility between mentor and protégé goals, (b) mentor’s training, (c) the effect of the geographic and operating environment, (d) adequacy of mentoring activities, (e) mentor’s gender, (f) nature of tasks and assignments as part of the training, (g) exposure to networking opportunities, (h) mentor’s leadership style, and (i) frequency of mentor-protégé meetings.

**Study Hypotheses**

Ten hypotheses were addressed in the study. Significance was determined at an alpha level of .05.

*H₀₁*: The compatibility between mentor and protégé goals is not correlated with protégé’ perceptions of satisfaction.

*Hₐ₁*: The compatibility between mentor and protégé goals is correlated with protégé’ perceptions of satisfaction.

*H₀₂*: Mentor training is not correlated with protégé satisfaction.

*Hₐ₂*: Mentor training is correlated with protégé satisfaction.

*H₀₃*: Dyad geography is not correlated with protégé satisfaction in different command operating environments.

*Hₐ₃*: Dyad geography is correlated with protégé satisfaction in different command operating environments.

*H₀₄*: Perceptions of adequacy of mentoring activities are not correlated with protégé satisfaction in work settings on or off duty.

*Hₐ₄*: Perceptions of adequacy of mentoring activities are correlated with protégé satisfaction in work settings on or off duty.
$H_{05}$: Mentor’s gender is not correlated with perceptions of satisfaction.

$H_{A5}$: Mentor’s gender is correlated with perceptions of satisfaction.

$H_{06}$: Perceptions of level of challenge in job assignments are not correlated with perceptions of protégé satisfaction.

$H_{A6}$: Perceptions of level of challenge in job assignments are correlated with perceptions of protégé satisfaction.

$H_{07}$: Perceptions of networking opportunities for career advancement are not correlated with protégé satisfaction.

$H_{A7}$: Perceptions of networking opportunities for career advancement are correlated with protégé satisfaction.

$H_{08}$: Mentor leadership in career, advancement, and development are not correlated with protégé satisfaction.

$H_{A8}$: Mentor leadership in career, advancement, and development are correlated with protégé satisfaction.

$H_{09}$: Time management is not correlated with protégé satisfaction for dyads who meet on an irregular basis.

$H_{A9}$: Time management is correlated with protégé satisfaction for dyads who meet on an irregular basis.

$H_{010}$: Protégé career expectations are not correlated with protégé satisfaction in a formal mentoring setting.

$H_{A10}$: Protégé career expectations are correlated with protégé satisfaction in a formal mentoring setting.
Figure 2 provides a visualization of the study’s structure, indicating how it answered the research question and tested the study hypotheses.

**Research Method**

This quantitative study on mentoring was motivated by the intent to gather evidence about the importance of a set of factors in satisfaction that was applicable to a variety of other military settings. The overall design of this study was correlational with the use of a survey as a data collection method.

The correlation methodology allowed inferences about the degree to which a set of variables co vary or are related. Conclusions about how well a set of variables predict a criterion were also drawn (Creswell, 2009).
A correlational design was chosen over other alternative quantitative methodologies (i.e., causal comparative and experimental) because: (a) the overall goal was to examine the viability of a prediction model, (b) observational data was to be gathered, (c) experimental manipulation was deemed inappropriate for the study’s research questions, and (d) a comparison of groups on a set of variables of interest was not within the scope of the study. Although prediction models can be tested in the context of experimental designs, this study adopted a non experimental approach to evaluate the U.S. Navy’s current mentoring program. Experimental designs require manipulation of probable causes; this kind of manipulation was considered inappropriate because of the nature of the phenomenon under investigation. The current mentoring program being used cannot be altered or suspended for any length of time. It should be noted, however, that because the correlational methodology does not involve experimental manipulation of one of the hypothetical predictors of interest, evidence of cause-effect relationships was weak (Kasprisim, Single, Ferrier, & Muller, 2008).

When intact groups or naturally occurring phenomena are examined both correlational and causal comparative designs can be used (Creswell, 2009). While causal comparative research, unlike correlational approach, attempts to understand the cause and effect relationship between variables by describing differences between groups on variables (Field, 2009), the focus in correlational studies is on the co variation between variables. As such, correlational designs typically involve one group of participants (Airasian & Gay, 2006).
The observational data for the study’s research questions were collected with a survey. The survey data collection allowed for inferences about participants’ opinions and attitudes that were generalized to the larger population from which the sample was drawn. A unique advantage of using a survey data collection technique was its efficiency (Creswell, 2009; Field, 2009; Gay et al., 2006). This study used a cross-sectional sample of U.S. Navy military personnel. A cross-sectional sample was chosen rather than a longitudinal sample, because the goal of the study was to provide a snapshot of participants’ current beliefs, rather than follow changes in these beliefs over time (Barak & Hasin, 2009; Johnson & Andersen, 2010).

**Target Population**

The target population for the study included U.S. Navy sailors in the enlisted ranks of E1 through E6 from the aviation squadrons of the U.S. Navy. Participants in the E1 through E6 ranks represented the junior sailors in the U.S. Navy and required development in the early phases of their careers. They were more likely to be exposed to different mentoring initiatives and provided an accurate account of mentorship activities. Participants in higher ranks did not represent the target population because those navy members have already successfully achieved career and psychosocial goals and objectives in order to attain those particular ranks and command positions.

The target population was limited to enlisted U.S. Navy service members who were on active duty. Enlisted members had more exposure to the mentoring opportunities as well as a larger pool of mentors available to them. This population excluded service members who were reservist members performing drill exercises on weekends, service
members with disabilities, and service members serving time away from the squadron on official business. The target population included female and male personnel and personnel representing different age groups.

**Sampling Frame and Participants Selection**

A list of all East and West U.S. naval squadrons was obtained. This list of U.S. navy squadrons was retrieved from naval doctrine, including LINK magazine, Proceedings magazine, and Approach magazine. Any additional squadrons not listed in these periodicals were retrieved from the CCC at squadrons close to the research site.

The participants were selected using a stratified sampling strategy. There were five different types of naval squadrons in the United States Navy used in the study. These included: (a) fighter / attack, (b) helicopter, patrol, (c) carrier airborne, (d) patrol, and (e) fleet logistics. Squadrons were then categorized according to type -- fighter/attack, helicopter, patrol, carrier airborne, and fleet logistics. That is, the squadrons were placed into one of five groups. The goal was to randomly select an even number of squadrons from each group using stratified sampling. In the stratified sampling strategy, each member of the target population had an equal chance of being selected (Creswell, 2008). For this study, a total of 17 squadrons were selected from the five groups with the aid of a table of random numbers. This approach provided an adequate representation of the five groups.

To identify the actual participants for the study, a multistage sampling technique using simple random sampling within a squadron was used. The simple random sampling was applied in the context of stratification described above.
Most U.S. Navy aviation squadrons carry a varying number of personnel. A goal of this study was to obtain a 10% representation from each squadron. Researchers (Barak & Hasin, 2009; Field, 2009; Zachary, 2012) recommended using 10% in formal studies to ensure generalization. In the context of this study, this percentage equated to 35 participants from each squadron. Once 17 squadrons were chosen, rosters of squadron personnel were obtained from each of the 17 squadrons. The individual members of the squadrons were assigned a number. Using a table of random numbers, 35 members per squadron were identified.

Participants with varying experiences (length of service) and of different age groups were a large part of the sample. In other words, participants were selected regardless of length of service (or time of service) and age. The study’s sampling strategy did not ensure equal representation of gender and age groups. The latter had consequential implications in the analysis of the data and limited generalizations were taken into account in the interpretation of the findings. There were instances where the selected participants were not assigned a mentor or had little experience with their current mentor. In these cases, the participants elected not to complete the survey or they marked the neutral response category repeatedly. Figure 3 provides the architecture for the study’s sampling frame visualization model. It is important to note that different platforms of aircraft contained a greater number of aviation squadrons than others.
Naval Aviation
Squadrons

Helicopter
(HSL, HSM, HSC)
3 Squadrons
35 Participants a squadron
105 total participants

Fighter / Attack
(VFA)
3 Squadrons
35 Participants a squadron
105 Total Participants

Patrol (VP)
3 Squadrons
35 Participants a squadron
105 total participants

Carrier Airborne (VAW)
3 Squadron
35 Participants a squadron
105 total participants

Fleet Logistics
(VR / VRC / )
5 Squadrons
35 Participants a squadron
175 Total participants

Figure 3. Sampling frame visualization model.
For this reason, fleet logistic squadrons was limited to just six squadrons. There was a possibility these actions may skew the study results and end with an outcome that is not commensurate of the populations true beliefs. For this reason, participants with no mentor were excluded from the study and a new participant was selected.

A decision was made as to how many participants would be drawn for the sample. Having a sample list to choose participants from was an advantage of using the simple random sampling method, as it was easy to obtain these master rosters from senior squadron personnel. My previous military experience allowed me to correspond with the appropriate personnel to get the data I required for this study. This sampling method was also easier to explain to non-technical audiences. The alternative sampling method considered for this study was the stratified method. As there was a concern about smaller subgroups not being represented, a stratified approach was also considered a suitable choice.

The sampling frame was obtained from a complete list of all U.S. Navy aviation squadrons. This list was retrieved from naval doctrine, including (a) LINK magazine, (b) Proceedings magazine, and (c) Approach magazine. Any additional squadrons not listed in these periodicals were retrieved from CCCs at squadrons close to the research site. Once 17 squadrons were randomly chosen from this list, a second sampling frame for the individual participants was drawn. This list was also obtained from CCCs and provided personal data, such as (a) the participant’s full name, (b) age, (c) gender, (d) social security number, (e) time in service, and (f) transfer / rotation dates.
Although the study survey instrument only solicited the gender, age, and time in service information, all data included in these lists were important since it was feasible to include a participant who may be transferring in and out of the squadron during the time the research was being conducted. Moreover, some individuals lacked a mentor or have broken off the relationship with their current one. The homogeneous sub-groups for this study belonged to the aviation field of the U.S. Navy only. This consisted only of aircraft squadrons and its current members. A goal of the study design was to minimize threats to validity, such as selection regression threat. There was a strong possibility this threat skewed the results because one group, and in this case, the target population of service members E1 through E6, were more extreme in their answers and thus yielded higher statistical mean than others. For example, participants in fighter/attack aviation squadrons were difficult to compare to participants in patrol or electronic attack aviation squadrons. The former participants had busier work schedules compared to the latter and answered survey questions irrationally because of their limited time. This was considered a selection bias or selection threat due to the fact certain types of aircraft squadrons were not compatible before the study began. However, as all squadrons were mandated to establish and operate their own formal mentoring programs, all were included in the study. Guidelines were established by NAVPERSCOMINST 5300.1 (2009) with respect to the clear purpose of keeping all U.S. Navy commands equal, whether they are aviation-related or not. The targeted audience consisted of male and female participants who had an equal chance of participation through random sampling.
It was expected that an equal number of males and females would be selected for analysis, but an unequal ratio still sufficed.

One consideration worth noting when selecting the sample was whether to include rated or non-rated personnel in the study. Rated personnel, in this context, implied that the potential participant has a Navy Enlisted Classification (NEC) code. The NEC described the service member’s knowledge, skills, qualifications, and aptitude on a particular aircraft or piece of test equipment. It was also described as an advanced specialty within a job (NAVPERSCOMINST 5300.1, 2009). Thus, possession of an NEC code meant that the service member had attended and successfully completed a military training school. With this additional training, the service member had been assigned a temporary mentor while under instruction in military technical schools. This yielded a benefit over non-rated personnel in terms of career and psychosocial support. Non-rated personnel were service members who have no NEC code and have yet to decide which career path to take. These personnel were more vulnerable to a lapse in career and psychosocial exposure compared to rated personnel and were perfect candidates for study participation. The limitation to this approach was using systematic random sampling, which did not distinguish between rated and non-rated personnel.

Selection of just non-rated personnel for the study offered convenience, but the threat of compensatory rivalry existed for rated personnel who felt that not being considered as a study participant was unjust. A decision was made as to not divulge the true intent of the study to the participants for fear they may choose to alter their answers. This did not skew the study and the outcome was recognized as valid. The cover letter
attached to each survey conveyed adequate information to guide the participant while not promulgating any details that affected the study effort. Therefore, to maintain randomization in the study, both rated and non rated personnel were included on the master roster for possible selection.

The last, but highly important characteristic of the sample was whether to include aviation squadrons that are on deployment abroad or stationed at their home base in the Continental United States (CONUS). Including squadrons on deployment tested a protégés’ satisfaction in different contexts, but induced drastically different marks on the survey because of their high operating tempo and inability to mentor on a scheduled basis. Home-based squadrons answered differently due to the fact they possessed available time to propagate the relationship. This dilemma of time management was a common theme in the reviewed literature and played an important role in the overall outcome of this study as well. An appropriate number of squadrons participated and they were equally divided between operating in CONUS and abroad. An analysis was then performed to determine if geography and time management were correlated and to what extent.

**Instrument**

A survey was the data collection tool for this study. A survey allowed for an assessment of the mentoring context in each squadron. The instrument most appropriate for this research study was a basic Likert scale with a five choice format structure. This scale was chosen for its convenience to participants as well as its ability to convey questions in an easy to understand format. This scale allowed more flexibility for
participants who were limited on personal and career time. Construction of the Likert-type scale lends its structure to past quantitative studies by Allen et al. (2006) and Feeney and Bozeman (2008). This simple yet effective format recorded participant responses to a particular variable in a transparent manner. Consideration for the design of the survey questions centered around three core areas. First, there was no need to screen participants prior to the study. As time management was a major concern for the participants, the test instrument was only administered once. Second, the questions were kept short to avoid instilling impatience in the participants. For this reason, survey questions were constructed of only one sentence with as little complexity as possible. The goal was to utilize wording that would be easy to follow and comprehend by the participants, irrespective of their aptitude and education level. Third, there was no need for follow up questions since this was a quantitative study.

**Instrument Sections**

The test instrument was divided into two sections. The first section consisted of four questions and solicited demographic information from the participant. Two dichotomous questions were posed to ascertain the protégé’s gender and the gender of their mentor. Questions three and four inquired about the rank of the participant and their time in service. The second section consisted of twenty multiple choice questions used to test the independent variables and represented ordinal data in both the career and personal mentoring areas. This section provided the participants with a five choice format for their responses. The available answers were: (a) strongly disagree, (b) disagree, (c)
neutral, (d) agree, and (e) strongly agree. This approach was modeled after a satisfaction study conducted by Poteat, Shockley, and Allen (2009).

**Instrument Development**

The architecture of the survey instrument was developed based on past studies (Allen et al., 2006; Bierrema & Hill, 2005; Chao, 2009; Creswell, 2009; Egan, 2005; Gay et al., 2006). The impetus for using this tool was the efficiency and ease of reaching the targeted audience. Development of this instrument was taken from prior research from Allen, Lentz, and Eby, 2006; Bozeman and Feeney, 2008; and Chao, 2009. Their research efforts utilized scores from Likert surveys to measure various factors associated with the mentoring process. A one-sentence question solicited responses for each independent variable in both the career and personal areas of mentoring.

**Instrument Validity**

There are many types of validity that affected this study, but construct and consequential validity were the most important and were the sole focus for the duration of the study.

**Construct Validity**

The test instrument was the operationalization of the study and proved the study constructs and theories behave in a way that followed an expected pattern. The first involved construct validity of the test instrument and according to Trochim (2001), should provide ample evidence the test instrument is measuring the construct in a way it operates in reality. Likert scales have been used successfully in past studies (Ehrich et al., 2004; Healy & Welchert, 1990; Lyons & Oppler, 2004; Poteat, Shockley, & Allen,
2009) with accurate inferences made from operationalizations. In order to ensure the highest level of construct validity, survey questions were directly stated in reference to one predictor variable at a time. The intention was to construct questions in a manner that accurately reflected the protégé’s satisfaction with each individual predictor variable. This required the test instrument to accurately reflect the career and lifestyles of sailors working on different types of aircraft, ships, submarines, and support equipment. In order to achieve these results, the survey questions were addressed strictly to aviation participants, but were broadly structured to encompass a wide range of sailors who maybe transferring from other fleets or different branches of military service.

The following concepts were assessed: (a) dyad compatibility, (b) mentor training, (c) dyad geography, (d) mentoring functions, (e) mentor / protégé gender, (f) challenging job assignments, (g) protégé visibility, (h) mentor leadership, (i) time management, and (j) protégé career expectations. The concepts were assessed with two items on an ordinal scale ranging from strongly disagree to strongly agree. Two survey questions on career and personal mentoring areas were used in order to test for the criterion protégé satisfaction.

**Consequential Validity**

Caution was exercised when constructing the test instrument as to not exert harmful mental or physical effects for the participants. Consequential validity referred to the adverse conditions that affected the study participants (Gay et al. 2006) and allowed the researcher to eliminate harmful test conditions in advance. Since there was no pre-trial testing of the test instrument, a possibility that answers provided by the participants...
offended their supervisors or mentor(s). This was given consideration in the design of the test instrument questions, whereby the choice of wording focused on examining only what the protégés foresee and want from a mentoring relationship. It by no means solicited negative responses with respect of a participant’s superiors or mentor(s). If this survey were structured in an open-ended format with the option of allowing the participants to say what they wanted, then consequential validity could have been compromised.

**Instrument Reliability**

Gay et al. (2006) defined reliability of a test instrument as, “The degree to which a test consistently measures whatever it is measuring” (p. 139). Following this conjecture, this study aimed at accurately measuring mentoring program participants with a test instrument that was used in different contexts of the U.S. Navy. Field (2009) and Trochim (2001) stated that reliability implies obtaining the same outcome repeatedly, provided that the external stimuli remain unchanged.

Thus, in the development of the test instrument, potential distractions to the participants while answering the questions were considered. Participants were given a choice of when and where to complete the survey, which they did so under various conditions, which also affected their answers. Trochim (2001) referred to this as noise or error, which should be taken into consideration. Haggard et al. (2011) confirmed this in their study indicating that distractions are common in both formal and informal settings, regardless of the environment they occur in. Although I could not control external
distractions, reliability was still increased by including a greater number of survey questions. This increased accuracy and reduced ambiguity.

The participants’ personal actions had beneficial or adverse effects on the study outcome. Some participants harbored resentful demoralization and abnegate completing the survey. Not only did this affect the study outcome statistically, but it also induced a perception that the survey questions are not measuring the right variable, or the structure of the study was not professional or warranted. Since there was no treatment group in the study, internal and construct validity was held to a minimum. The main internal validity threat stemmed from social interaction threats that appeared because of the context in which the study was performed. These threats included: (a) diffusion threats from participants knowing in advance of the study; (b) compensatory rivalry from squadrons wishing to perform exceptionally better than other squadrons, and (c) compensatory equalization of treatment resulting from squadron participants wishing to be in other aviation platforms who have less stressful working conditions.

**Study Model Description**

The test instrument was used to measure the relationship and correlations between 10 ordinal independent variables, and one dependent variable. The independent variables included: (a) dyad compatibility, (b) mentor training, (c) dyad geography, (d) mentoring functions, (e) mentor / protégé gender, (f) challenging job assignments, (g) protégé visibility and exposure, (h) mentor leadership and role modeling, (i) time management, and (j) protégé career expectations. The dependent variable throughout this study was the protégé’s satisfaction.
Dyad Compatibility

Compatibility between the mentor and the protégé was measured on an ordinal level scale. Inclusion of this variable in the study resulted from the inadequate structuring of the U.S. Navy’s program in that little to no foresight was given into properly matching mentor(s) to protégés on various characteristics, such as common hobbies, goals, and objectives. Compatibility in studies, such as those conducted by Southern (2007) and Healy and Welchert (1990), were shown to be an influential factor in sustaining a relationship. This study’s structure possessed characteristics that closely mimicked those of the study performed by Southern et al. and as expected this independent variable played a significant role in military mentoring dyads as well. Study results reported by Poteat et al. (2009) indicated presence of significant satisfaction with mentoring when the dyad was committed. This can be accomplished if compatibility exists in the relationship. Based on this compatibility literature, compatibility played an important role in this study.

Mentor Training

The amount of professional training a mentor received in this field was measured on an ordinal scale. Inclusion of this variable was precipitated by the need to ensure that mentors received professional instruction in all aspects of mentoring before training protégés. U.S. Navy instruction NAVPERSCOMINST 5300.1 (2009) pointed out that a mentoring program shall be in place in every naval command, but did not elaborate how specific training will be accomplished. Weinberg (2005, as cited in Martin & Sifers, 2012) recommended that training for the mentor should occur before a protégé was
assigned. Martin and Sifers elaborated further and state that mentor training should be a continuous process, in order to increase and sustain satisfaction in the relationship. Their study differed from this study in that participating members would have completed some form of training. The authors found that training significantly explained variability in protégé satisfaction.

**Dyad Geography**

The protégés geographical position in terms of being deployed or stationed at their home base was measured on an ordinal scale. It should be noted that the term ‘geographical position’ only referred to the squadron’s actual geographical position in the country and not the participant’s ranking or placement in the squadron. Few studies have examined the effects geographical position exerts on dyads. Crutcher (2007) only examined trends across cultures, but never mentioned in depth on how actual geographical positions play a part. This study bridged that gap by providing knowledge of formal mentoring practices that occurred in various contexts.

**Mentoring Functions**

Mentoring functions was the most influential ordinal variable tested by the survey. High correlations between the 10 independent variables occurred. Kram’s (1983) nine mentoring functions was not listed separately in this study; rather, a single sentence asked the participants if they felt that they are receiving adequate mentoring activities during their sessions with their mentor(s). Finding activities to perform during mentoring meetings was a barrier in a study on satisfaction conducted by Martin and Sifers (2012). However, the term ‘functions’ listed on the test instrument had an infinite
number of meanings to the participants. Thus, in this study a function was interpreted by the protégé as interactions between him or her and their mentor.

**Mentor / Protégé Gender**

The gender composition of the dyad in past studies included in the literature review had an instrumental effect on mentoring relationships. It appeared that it did not matter if the dyad contained same-sex or mixed-sex members. It was presupposed that the same effects would be experienced in this study as well. Testing of this variable provided a firm base of knowledge of the way dyads interacted in formal mentoring settings.

**Challenging Job Assignments**

Throughout the literature review, protégés reported having the opportunity to assume rewarding job assignments as a positive mentoring outcome (Kirchmeyer, 2005; Lentz & Eby, 2006; Pelegrini & Scandura, 2005). This ordinal variable received negative responses from the participants, not because of limited command assignments available, but rather as a product of the remaining variables involved. The possibility of a protégé assuming, or even having the chance to assume a challenging and rewarding job had a positive effect on the relationship. For this reason, investigation of the variable was warranted.

**Protégé Visibility**

Participant responses pertaining to this ordinal variable were closely linked with the challenging job assignments variable with a mix of negative as well as positive responses. The independent variables time management, mentor leadership and role
modeling, and mentor/protégé gender played a major role in influencing responses to this question. Protégés could not assume challenging and rewarding jobs if they were not exposed and visible to the right personnel in their chain of command or work environment. Therefore, it was critical this variable be examined for its effects.

**Mentor Leadership**

This test item question was developed from the MLQ-5X leadership questionnaire and was used to determine if the mentor was exhibiting the appropriate leadership style to meet the needs of the protégé. The initial consideration was to split this ordinal question into a filtered question to solicit further information that was more detailed. While this would have added more depth to understanding this variable and its role in mentoring, it would have been difficult to determine which sub question was more significant or had a mediating effect. The leadership quality of a mentor was just as important as any predictor variable in this study. Martin and Sifers (2012) study findings indicated that mentors who possessed confidence in their leadership ability often spent more mentoring time with their protégés. Thus, it was imperative to understand if the protégés have confidence in their mentor to lead and develop them. Testing of this variable indicated if a transformational leadership style was most effective.

**Time Management**

Measurement of this ordinal variable was performed on two levels. First, the variable was measured to assess the protégé’s ability to receive mentoring activities from his or her mentor(s). This involved the mentor providing adequate time to meet with the protégé on a scheduled basis. Second, there was a possibility the participants may
interpret the time management survey question as having little to no time to perform their military duties instead of mentoring activities. No clarification on the test instrument was provided; however, the question asked participants directly if time management was increasing their chances for career and personal development.

**Protégé Career Expectations**

The last ordinal variable tested was the expectations protégés hold for their program. This outcome variable seemed broad initially and difficult to test, but the final structure of the survey question allowed for narrowing of the protégé’s responses. The results from testing this variable indicated if the protégés feel the program is assisting them. Thus, null hypotheses were supported or rejected based on the responses pertaining to this variable. Rather, the results were used to tailor recommendations on what is most effective for the program. This variable summed up the protégé’s feelings about being mentored. Results obtained by testing this variable were derived from the cumulative frequency tables.

**Data Collection Procedures**

Data collection of the study was accomplished by direct trips to aviation squadrons stationed on both the East and West coasts of the continental United States. Distribution of the instruments consisted of three phases. The first phase involved initial contact with squadron representatives to brief them on the study and its significance to the mentoring process. This involved gaining their permission to perform the study on their command as well as obtaining a personnel roster of possible participants. The second phase involved meeting the randomly selected participants and explaining their
role in the study. This phase permitted questions and answers for participants who needed more information or clarification. The third phase involved distributing the instruments directly to the participants.

The collection of the instruments were performed in two phases. The first phase was to contact squadron representatives and schedule a time convenient to them for meeting with study participants. At this time study participants were given additional time to complete the instrument and answer any questions if necessary. The second phase involved collection of instruments from participants who could return them on time. To address this issue, participants were sent an e-mail as a follow up. Telephone correspondence were performed for participants who did not have Internet access. After one week, a second e-mail and telephone call were performed as a last attempt to retrieve the instruments.

The ability to contact East and West coast squadrons was easily accomplished, but including commands forward deployed to hostile regions was an impassable obstacle. In other words, instruments from squadrons located in the continental states (CONUS) were expected to return the surveys in a timely manner, but those operating overseas returned the surveys too late or not at all. Survey instruments were mailed to command representatives for squadrons that were deploying abroad. A self addressed and sealed envelope was also supplied to allow squadrons to return the completed instruments to this researcher.
Data Analysis

The parametric method of obtaining data for this study assumed the data would follow a probability distribution. This approach provided accurate estimates from which inferences about non-participating squadrons were drawn.

Multiple regression testing was the main tool used to understand the relationship between the 10 independent variables and the dependent variable. This approach allowed for understanding how the outcome changed with varying levels of changes in the independent variable. Using regression analysis was the main approach to estimate the unique contribution of each independent variable to the prediction of the criterion of satisfaction compared to all remaining independent variables. That is, the goal of this study determined which independent variable(s) induced the most change in the outcome variable when controlling for external variables. The main obstacle to using multiple regression in this study was the threat of multicollinearity. Multicollinearity exist when there is a strong correlation between two or more predictor variables in a regression model. Field (2009) recommended that any “R” value above .9 will violate the assumption of collinearity.

The significance of the multiple regression model was determined by the “F” value. The “F” value of the study was monitored to determine which groups of independent variables explained predictions in the outcome variable changes. Effect size was not calculated in this study because a treatment or control group was not used in the design structure.
Multiple regression tests were performed using SPSS 18 statistical software. This was important for analysis because knowing which variable or combination of variables caused the most changes in the outcome enabled mentoring program managers to compensate for their effect(s) or make recommendations and revisions in advance. By monitoring the “R” square values, I determined how much of the outcome variable changed by adding or removing different independent variables. SPSS software also yielded a variable coefficients table, which provided detailed data on the relationships between variables. Attention was paid to the unstandardized regression coefficients, which represented the direction and magnitude of the relationship between independent variables and the outcome variable. The significance of each predictor variable was examined with the T statistic. The significance level for this study was set at .05; hence, any individual regression coefficient below this level was considered significant. Finally, standardized beta values were used to distinguish by how many standard deviations the outcome variable changed for just one unit of change in the independent variable.

In order to understand the relationship between the independent and outcome variables, a linear model was fitted to the data. For this, a regression line was fit to the sum-of-squares. Bi-variate scatter plots were created to examine if the relations between predictors and the outcome are linear in nature. P-P plots were created to determine if the assumption of normality was met.

**Protection of Participant Rights**

This study examined variables that affected the formal mentoring process for protégés. To accomplish this, a Likert survey was issued to each participant,
accompanied with a cover letter and consent form explaining the intent and the overall goal of the research project. The Likert survey was the main test instrument in past formal and informal mentoring studies (Allen et al., 2009; Burke, 2008; Chao, 2009; Creswell, 2009; Egan, 2005; Franchetti, 2009) and proved to be valuable at collecting data. The participants had the option on the consent form to provide their full name and mailing address if they wished to receive results from the study. Additionally, they had the option to have the entire study mailed directly to them or use electronic mediums such as e-mail.

It should be noted that participants were allowed to omit revealing their names if they felt uncomfortable about their answers being read by others in their chain of command. Returned forms from squadrons in the study site areas were collected directly by this researcher. This was accomplished by collecting the instruments immediately upon their completion. Any participants needing additional time were allowed to leave the completed surveys with their Command Master Chief (CMC). A participant number was provided on each returned survey. This did not require any identifying personnel information, but was necessary in inputting data into the SPSS software for analysis. Field (2009) recommended that participant numbers be used, rather than names, to ensure confidentiality.

**Conclusion**

This chapter provided a summary of the study’s quantitative research design. This correlational study attempted to measure a protégé’s overall satisfaction in the mentoring process against 10 independent variables. The population for this study was
enlisted U.S. Navy sailors in the ranks of E1 through E6. Both males and females were eligible for selection. The sampling frame for this study was the enlisted sailors in the aviation field of the U.S. Navy. No other areas or commands outside of aviation were included.

The test instrument for this study was a standard Likert scale with five responses from which the participant can choose. This instrument was the most appropriate for collecting data in this study as it allowed participants to complete it at their convenience. The validity and reliability this test instrument offered made it a perfect choice for past and future research into the mentoring field. The protection of the participants’ rights was a high priority throughout this study. No participant names were included on the study survey or any subsequent publications that may arise from this research effort. This ensured anonymity and confidentiality.
Chapter 4: Results

Introduction

In this chapter I presented the results of the data analysis in the study. This study was undertaken to understand a protégé’s satisfaction with his or her mentoring program while immersed in a formal mentoring context. This chapter addresses participant survey responses in both the career and personal aspects of formal mentoring. Each independent variable was tested using two survey questions. The study used one question for career mentoring and the second question for personal mentoring areas.

This chapter indicates descriptive statistics of the demographic characteristics of the participants: protégé’s gender, mentor’s gender, rank, and time in service (TIS). This included data from response frequency tables, which consisted of the total number of responses from male and female participants and the overall cumulative percent of that response related to the total number of participants. This only applied to string variables.

Supporting data for each research question and hypotheses pertaining to the individual independent variables are presented. The data were used as overall support to accept or reject the null hypotheses. Tables and bar graphs are also presented for each predictor variable to give a discernible reference of the data.

Dissemination of the survey test instruments and collection of the data occurred over a 3 week time period for two reasons. One, some aviation squadrons were operating under high tempo operations and required more time to complete the surveys. This required me to move back and forth between different squadrons on the same U.S. Navy base. This meant I could not answer participant concerns or clarify with more
information on certain questions. Two, squadron CMC’s wished to include senior enlisted members in the ranks of E7 through E9 as well as commissioned officers in the study. I explained my position in-depth on several occasions to various squadron representatives as to why only E1 through E6 enlisted personnel were chosen. This caused a time management issue on my part.

**Research Questions and Hypotheses**

This study aimed at answering the following research question: How do protégés feel about the formal mentoring program they are assigned to and what external or internal factors influence their perceptions and overall satisfaction? This question was answered by employing inferential statistics. Kram’s(1983) mentor theory provided the conceptual framework for the study.

**Interpretations**

To determine if the 10 independent variables were influencing protégé satisfaction and to address the hypotheses, certain statistical components were extracted from the results. These included the following: (a) the “F” distribution value, (b) the regression coefficient “B”, and (c) the “R²” (coefficient of determination). The strength of variable correlations was determined by using Field's (2009) recommendations on SPSS software. Correlations were evaluated using the following conditions. small effect, .10 and below; moderate effect, .30 and below; and high effect, .30 and above.
Independent Variable

Only one independent variable was tested against the dependent variable at a time. This approach allowed for understanding how the individual variable affected the outcome of protégé satisfaction.

"F" Distribution Value

This was the most important statistical component during the analysis phase. The value of “F” for each variable determined if the null hypotheses were true or would be rejected. This value indicated how much variability the study model explained as to how much it could not explain.

Regression Coefficient “B”

The “B” value represented the gradient of the regression line. For this study this value represented a change in the outcome variable for one unit of change in the independent variable.

“R²” Coefficient of Determination

This value explained how much this variable accounted for total variance in the output. It represented how much variability in the outcome was accounted for by the individual predictor variables.

Sample Descriptive Statistics

A total of 17 different aviation squadrons were randomly chosen for this study. A decision was made to select 10% of the squadron population for inclusion in the study. Most naval aviation squadrons carry a roster of varying personnel in both the enlisted and commissioned officer ranks. With this amount, a sample of 35 personnel met the
10% requirement. This yielded a total of 600 surveys. Seventy five surveys were mailed to squadrons forward deployed outside of the continental United States. A self-addressed and stamped return envelope was included with the test instrument. I directly administered the remaining 525 surveys with oversight from senior squadron personnel. A total of 538 completed surveys were returned out of the 600. This gave the study an overall response ratio of 89.6%. This value far exceeded recommended study ratios by Trochim (2001) and Field (2009). Of the 75 surveys mailed to squadrons operating abroad, only 13 were returned. These surveys could have been lost due to negligence in the military mail system or members decided not to participate. A second follow-up e-mail was sent to squadron CMC’s to inquire about their intentions of still participating in this study. To no avail, the e-mails went unanswered. A determination was made to wait 2 additional weeks incase the forward deployed squadrons were not getting my correspondence or perhaps the mail system was operating slow or behind schedule.

Using the stratified sampling process did not guarantee an equal number of male and female participants would be chosen. While this would have been difficult to obtain randomly, the study did, however, indicate a relatively close male to female ratio for this string variable. Of the 538 total participants, 293 were male, which represented 54.5% of the sample population. Female participants accounted for 245 or 45.5%. The variable mentor gender also exhibited a male to female ratio similar to protégé gender. A total of 300 male mentors or 55.8% were represented in the study compared to 238 females or 44.2%. 
The frequency distribution of the rank variable was widely dispersed among the six enlisted ranks from E1 to E6. There appeared to be an even split among participants with a majority of the participants holding the rank of E6. Table 1 displays the results with E6 participants accounting for nearly one-quarter of the total sample population.

Table 1

<table>
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<tr>
<th>Variable</th>
<th>Frequency</th>
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</tr>
<tr>
<td>Female</td>
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<tr>
<td>E2</td>
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<td>E6</td>
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<td>Time in service:</td>
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<tr>
<td>1-3 years</td>
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<td>7-9 years</td>
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<td>10-12 years</td>
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<td>13-15 years</td>
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<td>16-20 years</td>
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<tr>
<td>Total:</td>
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<td>100</td>
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</table>

*Note. N = 538*

The E2 participants accounted for the least with only 45 members or 8.4% being represented.

The last variable evaluated was the time in service (TIS) variable. This variable was sub divided into 6 groups with each group representing a time span of 3 years. A majority of participants responded to the TIS block of 1 to 3 years at the most. Two
hundred thirty six participants or 44% of the sample population indicated they have
served in the military no more than 3 years. This clearly indicated that nearly one-half of
the sample participants are relatively new or junior to military service. The TIS
subgroups 7 to 9 years and 13 to 15 years were the smallest with response values of 46 or
8.6% and 41 or 7.6% respectively. Surprisingly, the 16-20 year sub group response was
high at 56 or 10.4%. This was in due part to the high number of E6 participants.

**Bivariant Correlations Between Study Variables**

Study correlations were obtained by measuring predictor variables with Kendall’s
Tau-B statistical testing. This test was more appropriate for ordinal level variables
(Norusis, 2010). Tables 2 and 3 displayed the relationships between predictor variables.

**Table 2**

*Kendall’s Tau-B Correlations, Means, and Standard Deviations for Predictor Variables (Career)*

<table>
<thead>
<tr>
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<td>11. Satisfaction (Dependent)</td>
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</table>

*Note. Correlation was significant at the .001 level; 1-tailed; N = 538*
Table 3

*Kendall’s Tau-B Correlations, Means, and Standard Deviations for Predictor Variables (Personal)*

<table>
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<tr>
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<th>1</th>
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</table>

*Note.* Correlation was significant at the .001 level; 1-tailed; \(N = 538\)

Interestingly, the mentor leadership and role-modeling variable had the highest correlations among other variables. This variable was highly associated with six other variables. The mean values for personal mentoring were significantly lower than career mentoring. This signified a more negative response towards the mentoring effort.
Hypotheses Testing

This section displays the response patterns from the participants to each survey question. The regression coefficient “B” values, coefficient of determination “R” values, and "F" statistical values were displayed to indicate the variable's influence on the outcome. The null hypotheses was accepted or rejected based on the strength of the "F" value. The strength of correlation between variables were also displayed. Table 4 displays the results of simple linear regression testing on the independent variables for career mentoring.

Table 4

Results From Simple Linear Regression Predicting Career Mentoring Satisfaction

<table>
<thead>
<tr>
<th>Predictor</th>
<th>B</th>
<th>S.E.</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dyad compatibility</td>
<td>0.247</td>
<td>0.047</td>
<td>27.495</td>
<td>0.001</td>
</tr>
<tr>
<td>Mentor training</td>
<td>0.277</td>
<td>0.049</td>
<td>31.892</td>
<td>0.001</td>
</tr>
<tr>
<td>Dyad geography</td>
<td>0.203</td>
<td>0.046</td>
<td>19.064</td>
<td>0.001</td>
</tr>
<tr>
<td>Mentor functions</td>
<td>0.313</td>
<td>0.047</td>
<td>44.675</td>
<td>0.001</td>
</tr>
<tr>
<td>Mentor/protégé gender</td>
<td>0.164</td>
<td>0.044</td>
<td>14.119</td>
<td>0.001</td>
</tr>
<tr>
<td>Challenging job assignments</td>
<td>0.313</td>
<td>0.044</td>
<td>49.631</td>
<td>0.001</td>
</tr>
<tr>
<td>Protégé visibility</td>
<td>0.283</td>
<td>0.045</td>
<td>38.94</td>
<td>0.001</td>
</tr>
<tr>
<td>Mentor leadership</td>
<td>0.322</td>
<td>0.046</td>
<td>48.431</td>
<td>0.001</td>
</tr>
<tr>
<td>Time management</td>
<td>0.289</td>
<td>0.047</td>
<td>37.542</td>
<td>0.001</td>
</tr>
<tr>
<td>Protégé career expectations</td>
<td>0.101</td>
<td>0.028</td>
<td>12.482</td>
<td>0.001</td>
</tr>
</tbody>
</table>

Table 4 indicated the strength the predictor variables have on the dependent variable career mentoring satisfaction. The variables mentor functions, challenging job assignments, and mentor leadership produced the largest changes in the dependent variable for one unit of change in the predictor variable. The "F" value for these

variables were significantly higher than the other study variables for career mentoring, which may be attributed to the mentor's personal characteristics and attitudes towards the mentoring effort. Table 5 displays the results of simple linear regression testing on the independent variables for personal mentoring.

Table 5

*Results From Simple Linear Regression Predicting Personal Mentoring Satisfaction*

<table>
<thead>
<tr>
<th>Personal Mentoring</th>
<th>B</th>
<th>S.E.</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dyad compatibility</td>
<td>0.217</td>
<td>0.037</td>
<td>34.839</td>
<td>0.001</td>
</tr>
<tr>
<td>Mentor training</td>
<td>0.175</td>
<td>0.037</td>
<td>22.294</td>
<td>0.001</td>
</tr>
<tr>
<td>Dyad geography</td>
<td>0.181</td>
<td>0.034</td>
<td>28.344</td>
<td>0.001</td>
</tr>
<tr>
<td>Mentor functions</td>
<td>0.241</td>
<td>0.034</td>
<td>42.068</td>
<td>0.001</td>
</tr>
<tr>
<td>Mentor/protégé gender</td>
<td>0.239</td>
<td>0.035</td>
<td>45.455</td>
<td>0.001</td>
</tr>
<tr>
<td>Challenging job assignments</td>
<td>0.294</td>
<td>0.035</td>
<td>70.119</td>
<td>0.001</td>
</tr>
<tr>
<td>Protégé visibility</td>
<td>0.289</td>
<td>0.034</td>
<td>70.848</td>
<td>0.001</td>
</tr>
<tr>
<td>Mentor leadership</td>
<td>0.269</td>
<td>0.035</td>
<td>60.008</td>
<td>0.001</td>
</tr>
<tr>
<td>Time management</td>
<td>0.31</td>
<td>0.035</td>
<td>78.703</td>
<td>0.001</td>
</tr>
<tr>
<td>Protégé career expectations</td>
<td>0.15</td>
<td>0.047</td>
<td>77.699</td>
<td>0.001</td>
</tr>
</tbody>
</table>

The results for personal mentoring differed from career mentoring. First, the "B" values were lower across all variables except time management, and mentor/protégé gender. These results were attributed to the mentors providing more support to the protégé outside of the work context. The "F" values were also noticeably higher for these variables compared to career mentoring. These high values were a clear indication personal mentoring needs improvement and allowed for easy assessment of whether the hypotheses should be accepted or rejected. Table 6 displays the participant responses for the dyad compatibility variable.
Dyad Compatibility

Table 6

Dyad Compatibility Responses

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Cum. %</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAREER</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>25</td>
<td>4.6</td>
<td>4.6</td>
</tr>
<tr>
<td>Disagree</td>
<td>71</td>
<td>13.2</td>
<td>17.8</td>
</tr>
<tr>
<td>Neutral</td>
<td>98</td>
<td>18.2</td>
<td>36.1</td>
</tr>
<tr>
<td>Agree</td>
<td>260</td>
<td>48.3</td>
<td>84.4</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>84</td>
<td>15.6</td>
<td>100</td>
</tr>
<tr>
<td>Total:</td>
<td>538</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>PERSONAL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>158</td>
<td>29.4</td>
<td>29.4</td>
</tr>
<tr>
<td>Disagree</td>
<td>180</td>
<td>33.5</td>
<td>62.8</td>
</tr>
<tr>
<td>Neutral</td>
<td>103</td>
<td>19.1</td>
<td>82</td>
</tr>
<tr>
<td>Agree</td>
<td>71</td>
<td>13.2</td>
<td>95.2</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>26</td>
<td>4.8</td>
<td>100</td>
</tr>
<tr>
<td>Total:</td>
<td>538</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Note. N = 538

The survey Questions 5 and 5b stated: "My mentor's career / personal goals are compatible with mine". A majority of participants, 48%, agreed with this question. Only 25 participants or 4.6% strongly disagreed that compatibility was a problem in the dyad in the career area of mentoring. Conversely, only 13% of participants agreed their mentors personal goals were compatible with theirs on a personal level with 34 % of participants indicating they disagree. Dyad compatibility was found to be highly correlated with mentor training, $r = .41$; mentor functions, $r = .45$; mentor leadership,
challenging job assignments, $r = .45$; visibility, $r = .40$; and time management, $r = .43$ in the career area. The variables geography, $r = .26$ and visibility, $r = .24$ had only moderate correlations in the personal area. This suggested that a mentor who provided the protégé with meaningful career and personal related mentoring functions and exhibited a transformational leadership style will have greater compatibility with the protégé. SPSS revealed a significant main effect for dyad compatibility, $F(1, 538) = 27.495, P < .001$ with an $R^2$ value of 4.9% in the career area and $F(1, 538) = 34.839, P < .001$ with an $R^2$ value of 6.1% in the personal area. With a degrees of freedom (df) of 1 and a study significance level set at .05, the null hypotheses ($H_0$) was rejected that compatibility between the mentor and protégé career and personal goals does not predict protégé’s perceptions of satisfaction. This was because there was a .000 probability of obtaining an "$F$" value of 27.5 or larger if the null hypotheses had been true. The regression coefficient "$B$" in Appendix A indicated for one unit of change in the independent variable dyad compatibility, the outcome variable protégé satisfaction will change by 24.7% for the career area. In the personal area, a 21.7% change occurred in the outcome. Myers, 1990(as cited in Field, 2009) cited VIF values that approach 10 may cause concern in the reliability of the regression coefficient "$B$" value. Results for personal compatibility was nearly opposite of career compatibility. This was a stark comparison to the 13% in the career mentoring area. The career and personal areas of compatibility had mean values of 2.31 and 3.57 respectfully.
**Mentor Training**

The mentors’ background and ability to mentor others revealed similar values to the dyad compatibility variable in the career mentoring area. The survey Questions 6 and 6b stated: "My mentor is properly trained in mentoring techniques to enhance my career / personal advancement". Tables 7 illustrated 257 participates or 48% agreed their mentor(s) were adequately trained to assume the position for career related purposes compared to 86 or 16% in the personal mentoring area. The responses for the disagree category indicated 77 participants or 14% for career and 180 participants or 34% for personal. The null hypotheses ($H_{02}$) stated: mentor training is not predictive of protégé satisfaction. Mentor training was found to be highly correlated with mentor functions, $r = .49$; mentor leadership, $r = .50$; compatibility, $r = .41$; challenging job assignments, $r = .46$; visibility, $r = .43$; and time management, $r = .47$ in the career area. For personal mentoring, only moderate correlations exist with geography, $r = .25$; and mentor functions, $r = .23$. This suggested a properly trained mentor who utilized effective functions at their meetings will improve protégé satisfaction. Table 7 displays the participant responses for the mentor training variable.
Table 7

*Mentor Training Responses*

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Cum. %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>12</td>
<td>2.2</td>
<td>2.2</td>
</tr>
<tr>
<td>Disagree</td>
<td>77</td>
<td>14.3</td>
<td>16.5</td>
</tr>
<tr>
<td>Neutral</td>
<td>95</td>
<td>17.7</td>
<td>34.2</td>
</tr>
<tr>
<td>Agree</td>
<td>257</td>
<td>47.8</td>
<td>82</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>97</td>
<td>18</td>
<td>100</td>
</tr>
<tr>
<td>Total:</td>
<td>538</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Cum. %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>113</td>
<td>21</td>
<td>21</td>
</tr>
<tr>
<td>Disagree</td>
<td>180</td>
<td>33.5</td>
<td>54.5</td>
</tr>
<tr>
<td>Neutral</td>
<td>125</td>
<td>23.2</td>
<td>77.7</td>
</tr>
<tr>
<td>Agree</td>
<td>86</td>
<td>16</td>
<td>93.7</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>34</td>
<td>6.3</td>
<td>100</td>
</tr>
<tr>
<td>Total:</td>
<td>538</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

*Note: N = 538*

SPSS testing denoted a main effect existed for mentor training in the career area, $F(1, 538) = 31.892, P < .001$ with an $R^2$ value of 5.6% compared to $F(1, 538) = 22.294, P < .001$ with an $R^2$ value of 4% for the personal area. The "$F" ratio was significant at .01 for both career and personal areas, which resulted in rejection of the null hypotheses. Appendix B indicated the "$B" value was also significant with a change of 28% in the outcome variable for every one unit of change in mentor training and just 18% for the personal area. The $R^2$ value for this variable was relatively low compared to other study variables. This means a mentor can increase satisfaction in his or her protégé if they receive additional or in-depth mentoring techniques. This however, was only for career mentoring related purposes. The personal mentoring area suggested little to no satisfaction improvements can be realized. For personal mentoring, participants indicated
they were not satisfied with their mentor's overall training. The high number of disagree and neutral responses were an indicator of this. The career and personal areas of mentor training had mean values of 3.65 and 2.53 respectfully.

Dyad Geography

As indicated in table 8, the context under which the mentoring dyad occurred provided mixed responses from participants with a high response rate in the neutral category for both career and personal mentoring areas. The survey Questions 7 and 7b stated: "My command's operating environment affects the relationship I have with my mentor on career / personal advancement". In the career mentoring area, 214 participants or 40% agreed the environment under which mentoring was conducted had an influence on the mentor / protégé relationship. In the personal mentoring area, 76 participants or 14.1% were in agreement. What was more interesting was the number of participants who responded neutral to the survey question for both career and personal mentoring areas. One hundred fifteen participants or 21.4% for the career mentoring area were unsure if the operating environment was an issue or factor in the relationship with a near identical personal response of 116 or 21.6%. There was a possibility the participants had little to no experience being mentored in any other context and have no reference to compare to. Dyad geography had correlations with gender, $r = .39$ and challenging job assignments, $r = .30$, but only moderate correlations with the remaining study variables in the career mentoring area. In the personal mentoring area dyad geography only had moderate correlations with compatibility, $r = .26$; mentor training, $r = .25$; mentor
functions, \( r = .21 \); gender, \( r = .25 \); challenging job assignments, \( r = .20 \); and visibility, \( r = .20 \). Table 8 displays the participant responses for the dyad geography variable.

Table 8

*Dyad Geography Responses*

<table>
<thead>
<tr>
<th>CAREER</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cum. %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>17</td>
<td>3.2</td>
<td>3.2</td>
</tr>
<tr>
<td>Disagree</td>
<td>90</td>
<td>16.7</td>
<td>19.9</td>
</tr>
<tr>
<td>Neutral</td>
<td>115</td>
<td>21.4</td>
<td>41.3</td>
</tr>
<tr>
<td>Agree</td>
<td>214</td>
<td>39.8</td>
<td>81</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>102</td>
<td>19</td>
<td>100</td>
</tr>
<tr>
<td>Total:</td>
<td>538</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PERSONAL</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cum. %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>144</td>
<td>26.8</td>
<td>26.8</td>
</tr>
<tr>
<td>Disagree</td>
<td>154</td>
<td>28.6</td>
<td>55.4</td>
</tr>
<tr>
<td>Neutral</td>
<td>116</td>
<td>21.6</td>
<td>77</td>
</tr>
<tr>
<td>Agree</td>
<td>76</td>
<td>14.1</td>
<td>91.1</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>48</td>
<td>8.9</td>
<td>100</td>
</tr>
<tr>
<td>Total:</td>
<td>538</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

*Note. N = 538*

SPSS testing indicated a significant main effect for dyad geography in the career mentoring area, \( F(1,538), = 19.064, P < .001 \) with an \( R^2 \) value of 3.4% compared to \( F(1,538), = 28.344, P < .001 \) with an \( R^2 \) value of 5% for personal advancement. The null hypotheses \((H_03)\) for this variable stated: Dyad geography is not predictive of protégé satisfaction in different command operating environments. The high "\( F \)" values for both career and personal mentoring areas warrant rejection of the null hypotheses. Table 8
indicated only moderate correlations exist with other predictor variables for both career and personal areas. Only a strong relationship existed between dyad geography and gender in career mentoring. The "B" value in Appendix C indicated only a 20% can be explained in the outcome for one unit of change in dyad geography in the career mentoring area compared to 18% for the personal mentoring area. The career and personal areas of dyad geography had mean values of 3.55 and 2.50 respectfully.

**Mentor Functions**

The mentor functions variable was highly correlated to compatibility, \( r = .45 \); mentor training, \( r = .49 \); challenging job assignments, \( r = .49 \) visibility, \( r = .49 \) time management, \( r = .49 \); and most noticeably, mentor leadership, \( r = .51 \) in the career mentoring area. The personal mentoring area only had moderate correlations to all study variables. What was unexpected was the low correlations the variable had with gender of the mentor in the career mentoring area. The survey Questions 8 and 8b stated: "My mentor is providing adequate mentoring activities during career / personal meeting sessions". Table 9 indicated 228 participants or 42.4% agreed with the career survey question their mentor is providing activities during meeting sessions in the career area. For personal mentoring, a mere 102 participants or 19% agreed activities were sufficient. In the career mentoring area, participants responding to the neutral block accounted for 21%. Responses for the personal mentoring were even higher at 29%. This high rate of neutral responses were in due part to the survey question not being more specific in explaining typical mentoring activities or the protégé may be referring to mentoring activities as career or personal building tasks and duties. Participants were unaware or
had no firm stance on what functions should be taking place in the relationship.

Appendix D indicated a large main effect for mentor functions in the career mentoring area compared to other study variables, \( F(1, 538), = 44.675, P < .001 \) with an \( R^2 \) value of 7.7\%. The personal area effect came in at \( F(1, 538), = 42.068, P < .001 \) with an \( R^2 \) value of 7.3\%. Table 9 displays the participant responses for the mentor functions variable.

Table 9

*Mentor Function Responses*

<table>
<thead>
<tr>
<th>CAREER</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cum. %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>22</td>
<td>4.1</td>
<td>4.1</td>
</tr>
<tr>
<td>Disagree</td>
<td>78</td>
<td>14.5</td>
<td>18.6</td>
</tr>
<tr>
<td>Neutral</td>
<td>130</td>
<td>24.2</td>
<td>42.8</td>
</tr>
<tr>
<td>Agree</td>
<td>228</td>
<td>42.4</td>
<td>85.1</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>80</td>
<td>14.9</td>
<td>100</td>
</tr>
<tr>
<td>Total:</td>
<td>538</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PERSONAL</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cum. %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>98</td>
<td>18.2</td>
<td>18.2</td>
</tr>
<tr>
<td>Disagree</td>
<td>151</td>
<td>28.1</td>
<td>46.3</td>
</tr>
<tr>
<td>Neutral</td>
<td>156</td>
<td>29</td>
<td>75.3</td>
</tr>
<tr>
<td>Agree</td>
<td>102</td>
<td>19</td>
<td>94.2</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>31</td>
<td>5.8</td>
<td>100</td>
</tr>
<tr>
<td>Total:</td>
<td>538</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

*Note. N = 538*

The "\( F \)" values were significant at .01. The "\( B \)" values indicated a 31\% improvement can be expected in protégé satisfaction for one unit of change in mentor functions in the career mentoring area compared to 24\% for personal mentoring. The null hypotheses \((H_04)\) stated: Perceptions of adequacy of mentoring activities does not predict protégé satisfaction in work settings on or off duty. With "\( F \)" values this high and a significance
level below .05, the null hypotheses was rejected. The career and personal areas of mentor functions had mean values of 3.49 and 2.66 respectfully.

Mentor/Protégé Gender

In past studies (Okurame, 2008; Wilks, 2008; Weinberg & Lankau, 2010; Young & Perrewe, 2000) the gender of the mentor was a prominent factor in the overall success of the relationship. This previous research proved that same sex dyads were more effective in the mentoring effect than mixed dyads. In this study 43 protégés or 7.9% of all participants surveyed reported having a mentor of the opposite gender. While this amount was minimum compared to the other study participants, it did in fact confirm that some aviation commands are willing to assign opposite gender mentors in their programs. Mentor/protégé gender had high correlations with geography, $r = .39$ and challenging job assignments, $r = .30$ in the career area and challenging job assignments, $r = .31$ in the personal area. Both had just moderate correlations with the remaining study variables. The $R^2$ value for career was 3% with a stronger value of 7% for personal mentoring. Table 10 displays the participant responses for the mentor/protégé gender variable.
Table 10

*Mentor/Protégé Gender Responses*

<table>
<thead>
<tr>
<th>CAREER</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cum. %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>33</td>
<td>6.1</td>
<td>6.1</td>
</tr>
<tr>
<td>Disagree</td>
<td>90</td>
<td>16.7</td>
<td>22.9</td>
</tr>
<tr>
<td>Neutral</td>
<td>109</td>
<td>20.3</td>
<td>43.1</td>
</tr>
<tr>
<td>Agree</td>
<td>209</td>
<td>38.8</td>
<td>82</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>97</td>
<td>18</td>
<td>100</td>
</tr>
<tr>
<td>Total:</td>
<td>538</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PERSONAL</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cum. %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>125</td>
<td>23.2</td>
<td>23.2</td>
</tr>
<tr>
<td>Disagree</td>
<td>175</td>
<td>32.5</td>
<td>55.8</td>
</tr>
<tr>
<td>Neutral</td>
<td>121</td>
<td>22.5</td>
<td>78.3</td>
</tr>
<tr>
<td>Agree</td>
<td>79</td>
<td>14.7</td>
<td>92.9</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>38</td>
<td>7.1</td>
<td>100</td>
</tr>
<tr>
<td>Total:</td>
<td>538</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

*Note. N = 538*

The mentor protégé gender variable did not reveal any significant correlations. Only dyad geography had a moderate relationship with gender. The survey Questions 9 and 9b stated: "The gender of my mentor makes a difference in the level of mentoring provided for career / personal advancement". Table 10 indicated 209 participants or 39% agreed with this question in the career mentoring area and only 79 participants or 15% for the personal mentoring area. On the opposite extreme, one-third or 33% of all participants in the personal mentoring area marked the disagree response indicating the mentor's gender had no bearing on personal satisfaction. This result was commensurate with a previous study from McNamara et al. (2008). Appendix E indicated mentor protégé gender had a small main effect in the career area, $F(1,538) = 14.119$, $P < .001$ with an $R^2$ value of
2.6% compared to the personal area of $F(1,538), = 45.455, P < .001$ with an $R^2$ value of 7.8%. The "B" value indicated a 16% change in the career area can be realized in protégé satisfaction for one unit of change in mentor/protégé gender compared to a 24% change in the personal area. The "F" values were significant at .01, which resulted in rejection of the null hypotheses ($H_05$) for career mentoring, but must be accepted for personal mentoring. Only 3% of the total sample involved a mixed dyad, which supported the null hypotheses, but this small percentage was negligible because of randomization. The career and personal areas of mentor/protégé gender had mean values of 3.46 and 2.50 respectfully.

**Challenging Job Assignments**

Table 11 indicated the protégés’ responses on how well the mentor is providing challenging and rewarding job assignments for career and personal advancement. The survey Questions 10 and 10b stated: "My mentor is providing me with challenging and rewarding job assignments to increase my career / personal advancement". An overwhelming number of participants agreed with the survey question their mentor is providing them with challenging and rewarding job assignments to increase their career / personal advancement. A large number of participants, 235 or 44% agreed this relationship need was being met in the career mentoring area compared to 157 participants or 29% in the personal mentoring area. Both career and personal mentoring responses for the neutral category were 19 and 25% respectfully. Table 11 displays the participant responses for the challenging job assignments variable.
### Table 11

**Challenging Job Assignments Responses**

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Cum. %</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CAREER</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>26</td>
<td>4.8</td>
<td>4.8</td>
</tr>
<tr>
<td>Disagree</td>
<td>88</td>
<td>16.4</td>
<td>21.2</td>
</tr>
<tr>
<td>Neutral</td>
<td>102</td>
<td>19</td>
<td>40.1</td>
</tr>
<tr>
<td>Agree</td>
<td>235</td>
<td>43.7</td>
<td>83.8</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>87</td>
<td>16.2</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>538</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Cum. %</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PERSONAL</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>131</td>
<td>24.3</td>
<td>24.3</td>
</tr>
<tr>
<td>Disagree</td>
<td>157</td>
<td>29.2</td>
<td>53.5</td>
</tr>
<tr>
<td>Neutral</td>
<td>132</td>
<td>24.5</td>
<td>78.1</td>
</tr>
<tr>
<td>Agree</td>
<td>88</td>
<td>16.4</td>
<td>94.4</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>30</td>
<td>5.6</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>538</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

*Note. N = 538*

This high response rate was an indication participants were not sure if the job assignments afforded to them by their mentor were for work related purposes or as a part of the mentoring process. Challenging job assignments had high correlations with compatibility, \( r = .40 \); mentor training, \( r = .46 \); geography, \( r = .30 \); mentor functions, \( r = .49 \); visibility, \( r = .51 \); mentor leadership, \( r = .51 \); and time management, \( r = .49 \) in the career area. As indicated in Appendix F, the largest main effect in this study belonged to this variable, \( F(1, 538), = 49.631, P < .001 \) with an \( R^2 \) value of 8.5% in the career area and \( F(1, 538), = 70.119, P < .001 \) with an \( R^2 \) value of 11.6% in the personal area. The null hypotheses (\( H_{06} \)) for this variable stated: "The perceptions of level of challenge in job assignments does not predict perceptions of protégé satisfaction". The high "\( F\)" values in...
both career and personal mentoring areas did not justify accepting the null hypotheses, which was rejected. Appendix F shows a "B" value of 31% change in protégé satisfaction in the career area and 29% in the personal area. The career and personal areas of challenging job assignments had mean values of 3.50 and 2.50 respectfully.

Protégé Visibility

The participants had opposite responses to their mentor providing them visibility for career advancement in both the career and personal mentoring areas. The survey Questions 11 and 11b stated: "My mentor provides me with visibility and networking opportunities for career / personal advancement". Table 12 indicated 248 participants or 46% of participants agreed with the survey question their mentor provided sufficient visibility to enhance career opportunities while only 92 participants or 17% agreed in the personal mentoring area. This variable exhibited the lowest number of neutral responses in the study. Visibility had high correlations with compatibility, $r = .41$; mentor training, $r = .43$; mentor functions, $r = .49$; challenging job assignments, $r = .51$; mentor leadership, $r = .51$; and time management, $r = .53$ in the career area with mentor leadership, $r = .33$ in the personal area. Table 12 displays the participant responses for the protégé visibility variable.
Table 12

Protégé Visibility Responses

<table>
<thead>
<tr>
<th>CAREER</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cum. %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>25</td>
<td>4.6</td>
<td>4.6</td>
</tr>
<tr>
<td>Disagree</td>
<td>86</td>
<td>16</td>
<td>20.6</td>
</tr>
<tr>
<td>Neutral</td>
<td>94</td>
<td>17.5</td>
<td>38.1</td>
</tr>
<tr>
<td>Agree</td>
<td>248</td>
<td>46.1</td>
<td>84.2</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>85</td>
<td>15.8</td>
<td>100</td>
</tr>
<tr>
<td>Total:</td>
<td>538</td>
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<td>100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PERSONAL</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cum. %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>124</td>
<td>23</td>
<td>23</td>
</tr>
<tr>
<td>Disagree</td>
<td>149</td>
<td>27.7</td>
<td>50.7</td>
</tr>
<tr>
<td>Neutral</td>
<td>136</td>
<td>25.3</td>
<td>76</td>
</tr>
<tr>
<td>Agree</td>
<td>92</td>
<td>17.1</td>
<td>93.1</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>37</td>
<td>6.9</td>
<td>100</td>
</tr>
<tr>
<td>Total:</td>
<td>538</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Note. N = 538

Appendix G indicated a significant effect existed in the career area for this study variable, \( F(1, 538), = 38.940, P < .001 \) with an \( R^2 \) value of 6.8% compared to \( F(1, 538), = 70.848, P < .001 \) with an \( R^2 \) value of 11.7% in the personal area. The "B" value in both career and personal areas was nearly identical at 28%. This indicated any change in visibility exposure will increase protégé satisfaction equally. The null hypotheses (\( H_{07} \)) stated: "Perceptions of networking opportunities for career advancement are unrelated to protégé satisfaction". This hypothesis was also rejected in both career and personal mentoring areas due to the high values of "\( F \)". The career and personal areas of protégé visibility had mean values of 3.52 and 2.57 respectfully.
Mentor Leadership

The survey Questions 12 and 12b stated: "My mentor's leadership style is appropriate to facilitate increased learning in the career / personal areas of my development". The mentor leadership variable was also highly correlated with compatibility, $r = .45$; mentor training, $r = .50$; mentor functions, $r = .51$; challenging job assignments, $r = .51$; visibility, $r = .51$; and time management, $r = .57$ in the career area with only moderate correlations in the personal area. Table 13 indicated 237 participants or 44% of participants agreed their mentor’s leadership style was appropriate for increased learning and development in the career mentoring area compared to 89 participants or 17% in the personal mentoring area. The career mentoring area had a main effect of, $F(1, 538), = 48.431, P < .001$ with an $R^2$ value of 8.3% compared to $F(1, 538), = 60.008, P < .001$ with an $R^2$ value of 10.1% for the personal mentoring area. The "B" values in Appendix H indicated a 32% change in the outcome can be realized by one unit of change in mentor leadership in the career mentoring area and 27% for personal mentoring. Table 13 displays the participant responses for the mentor leadership variable.
Table 13

*Mentor Leadership Responses*

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Cum. %</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CAREER</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>14</td>
<td>2.6</td>
<td>2.6</td>
</tr>
<tr>
<td>Disagree</td>
<td>90</td>
<td>16.7</td>
<td>19.3</td>
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<tr>
<td>Neutral</td>
<td>98</td>
<td>18.2</td>
<td>37.5</td>
</tr>
<tr>
<td>Agree</td>
<td>237</td>
<td>44.1</td>
<td>81.6</td>
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<tr>
<td>Strongly Agree</td>
<td>99</td>
<td>18.4</td>
<td>100</td>
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</tr>
<tr>
<td><strong>PERSONAL</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>112</td>
<td>20.8</td>
<td>20.8</td>
</tr>
<tr>
<td>Disagree</td>
<td>166</td>
<td>30.9</td>
<td>51.7</td>
</tr>
<tr>
<td>Neutral</td>
<td>129</td>
<td>24</td>
<td>75.7</td>
</tr>
<tr>
<td>Agree</td>
<td>89</td>
<td>16.5</td>
<td>92.2</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>42</td>
<td>7.8</td>
<td>100</td>
</tr>
<tr>
<td>Total:</td>
<td>538</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

*Note. N = 538*

The null hypotheses ($H_{08}$) for this variable stated: "Mentor leadership in career, advancement, and development is not predictive of protégé satisfaction". The high "F" values for both career and personal mentoring warranted rejection of the null hypotheses. The career and personal areas of mentor leadership had mean values of 3.59 and 2.60 respectfully.

**Time Management**

The survey Questions 13 and 13b stated: "I am comfortable with the meeting frequencies with my mentor to discuss career / personal goals and objectives". The time management variable in table 14 indicated it received nearly half of all participant
responses in the agree category for career mentoring. A large number of participants, 251 or 47% of participants agreed time management was an important factor in their mentoring relationship. Table 14 displays the participant responses for the time management variable.

Table 14

*Time Management Responses*

<table>
<thead>
<tr>
<th>CAREER</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cum. %</th>
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</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>16</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Disagree</td>
<td>98</td>
<td>18.2</td>
<td>21.2</td>
</tr>
<tr>
<td>Neutral</td>
<td>95</td>
<td>17.7</td>
<td>38.8</td>
</tr>
<tr>
<td>Agree</td>
<td>251</td>
<td>46.7</td>
<td>85.5</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>78</td>
<td>14.5</td>
<td>100</td>
</tr>
<tr>
<td>Total:</td>
<td>538</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PERSONAL</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cum. %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>119</td>
<td>22.1</td>
<td>22.1</td>
</tr>
<tr>
<td>Disagree</td>
<td>173</td>
<td>32.2</td>
<td>54.3</td>
</tr>
<tr>
<td>Neutral</td>
<td>120</td>
<td>22.3</td>
<td>76.6</td>
</tr>
<tr>
<td>Agree</td>
<td>94</td>
<td>17.5</td>
<td>94.1</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>32</td>
<td>5.9</td>
<td>100</td>
</tr>
<tr>
<td>Total:</td>
<td>538</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

*Note. N = 538*

Only 94 participants or 18% in the personal mentoring area agreed. This variable had high correlations with compatibility, $r = .43$; mentor training, $r = .47$; mentor functions, $r = .50$; challenging job assignments, $r = .50$; visibility, $r = .53$; and mentor leadership, $r = .58$ in the career area. This represented the highest correlations in the study. The personal mentoring area had only slight to moderate correlations. Appendix I indicated a
main effect of $F(1, 538), = 37.542, P < .001$ with an $R^2$ value of 6.5% in the career mentoring area and $F(1, 538), = 78.703, P < .001$ with an $R^2$ value of 12.8% in the personal mentoring area. The difference in the $R^2$ values for time management was the largest in the study. Data indicated seven percent for career mentoring and 12 percent for personal mentoring. The null hypotheses ($H_0$) for this variable stated: "Time management is not predictive of protégé satisfaction for dyads who meet on an irregular basis". The high response rate in the agree category along with "$B" values of 28% in the career mentoring area and 31% in the personal mentoring area allowed for rejection of the null hypotheses. The career and personal mentoring areas of time management had mean values of 3.51 and 2.53 respectfully.

**Protégé Career Expectations**

The survey Questions 14 and 14b stated: "My command's mentoring program exceeds my expectations for career / personal advancement". The protégé expectations in table 15 received nearly equal marks for all survey responses in the career mentoring area. Over 163 participants or 30% agreed their command’s mentoring program exceeded their expectations for success in the career area. Only 59 participants or 11% responded to agree in the personal mentoring area. This represented the lowest number of agree responses in the study. This was a clear indication participants were not happy with their mentoring experience. What was noteworthy was the responses for the disagree and neutral categories. Both career and personal mentoring areas each received 22%. This was a strong indication participants had little confidence in the effectiveness
of their mentoring programs. This variable had no strong correlations in both the career and personal mentoring areas. Appendix J indicated the protégé expectation variable had a small effect in the career mentoring area, $F(1, 538) = 12.482, P < .001$ with an $R^2$ value of 2.3% and $F(1, 538) = 77.699, P < .001$ with an $R^2$ value of 12% in the personal mentoring area. Table 15 displays the participant responses for the protégé career expectations variable.

Table 15
*Protégé Career Expectation Responses*

<table>
<thead>
<tr>
<th>CAREER</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cum. %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>141</td>
<td>26.2</td>
<td>26.2</td>
</tr>
<tr>
<td>Disagree</td>
<td>118</td>
<td>21.9</td>
<td>48.1</td>
</tr>
<tr>
<td>Neutral</td>
<td>116</td>
<td>21.6</td>
<td>69.7</td>
</tr>
<tr>
<td>Agree</td>
<td>163</td>
<td>30.3</td>
<td>100</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total:</td>
<td>538</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PERSONAL</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cum. %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>142</td>
<td>26.4</td>
<td>26.4</td>
</tr>
<tr>
<td>Disagree</td>
<td>197</td>
<td>36.6</td>
<td>63</td>
</tr>
<tr>
<td>Neutral</td>
<td>130</td>
<td>24.2</td>
<td>87.2</td>
</tr>
<tr>
<td>Agree</td>
<td>59</td>
<td>11</td>
<td>98.1</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>10</td>
<td>1.9</td>
<td>100</td>
</tr>
<tr>
<td>Total:</td>
<td>538</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

*Note. N = 538*

The null hypotheses ($H_{010}$) stated: "Protégé career expectations are unrelated to protégé satisfaction in a formal mentoring setting". The $B$ values for career and personal mentoring areas were 10% and 31% respectfully. With $F$ values this low the null
hypotheses was accepted. The career and personal mentoring areas of protégé career expectations had mean values of 2.56 and 2.25 respectfully.

**Conclusions**

Study results suggested that formal mentoring programs can be influenced by external factors. While these factors played a large role in influencing participant responses, they can be mitigated to improve formal or informal mentoring practices. This study's results revealed the strongly disagree and disagree responses accounted for over one-half of all possible participant responses for the personal mentoring area. These results were alarming and predictions of these negative responses early in the study was never approximated. A noticeable difference between the career and personal mentoring areas were the number of responses to the neutral category. The career mentoring area had an average neutral response value of 19.6 compared to the personal mentoring area of 23.6. These large values of neutral responses indicated participants were not sure if their mentoring programs were effective at meeting their needs. It was alarming how negative the participants were in the personal mentoring area. During retrieval of the surveys, some participants commented on how different they were in terms of compatibility with their mentors. This definitely caused problems in formal and informal contexts. The data results for personal mentoring were dramatically different compared to career mentoring. It was if the dyads were not planning or setting personal goals and objectives. This was attributed to the formal mentoring process itself.

It was not necessary to perform a "T" statistical test for this study since the "B" value for each variable was significantly greater than 0 (Field, 2009). The study data
revealed the independent variables contributed in small amounts individually to outcome variable changes. These results were considered significant. An interesting find in this study was the large increases in $R^2$ for personal mentoring compared to career mentoring. This occurred across all independent variables except mentor functions. It was easy to see a small change in the response patterns such as this caused dramatic improvements in the outcome.

In chapter 5, I discuss interpretation of the study findings for each independent variable. This includes the participant response percentages for each survey question as well as how results from this study compared to the literature findings. Recommendations for action were also discussed on how mentoring can be improved in formal and informal contexts. Mentoring effects were also outlined and how they may have policy implications for the military unit or organization. Lastly, recommendations for future research into this field were discussed for each independent variable. This included comparing this study's results to the literature and determining their effects on mentoring policies.
Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

In this last chapter, I discussed the study results for each independent variable. This study was performed to evaluate 10 independent variables affecting the mentoring process in a formal setting. Analysis included my personal observations and assumptions for the outcome. Recommendations for action are discussed and how mentoring can be improved in both formal and informal contexts. Lastly, future research recommendations are presented for each variable as well as the benefits that maybe gained. The research questions that guided this study were the following:

1. Is compatibility in the dyad affecting the protégé's satisfaction with the mentoring process?

2. Is the mentor's training affecting the protégé's satisfaction in a formal mentoring setting?

3. Is the aviation command’s operating and geographic environment affecting the protégé's satisfaction with the mentoring process?

4. Are adequate mentoring functions increasing the protégé's satisfaction in both career and personal settings?

5. Does mentor/protégé gender make a difference in the level of mentoring satisfaction provided in formal mentoring programs?

6. Is the mentor providing challenging job assignments for the protégé for professional growth?
7. Is mentorship networking increasing the protégé's satisfaction for career advancement?

8. Does the mentor’s leadership style influence protégé satisfaction in the career, advancement, and development phases of the mentoring relationship?

9. Is time management between mentor and protégé a factor in the protégé’s satisfaction with the mentoring process?

10. Is there a relationship between protégé career expectations and their satisfaction in formal mentoring settings?

It was necessary to examine each independent variable with two questions. One question was used for career satisfaction purposes while the second question was used for personal satisfaction. Study results were closely related in terms of participant responses across all 10 variables.

**Interpretation of Findings**

The 10 research questions and hypotheses in this study were interpreted by comparing the outcome to Kram’s mentor theory. This discussion correlated the literature bases to the data obtained. Study results for each independent variable were evaluated using a separate question for both the career and personal mentoring aspects. An interesting finding in this study was how similar the neutral responses were across all 10 variables in both career and personal mentoring. Responses ranged from 17% to 24% in the neutral response category for career mentoring and 19% to 29% for personal mentoring. This outcome seemed extremely high to me and was attributed to the protégés' reluctance to admit their mentoring relationship needed improvements. This
reluctance was out of fear of retaliation if they provide a negative response. More data should be collected using a personal one-on-one setting. This approach would allow the participants to be more confident knowing only the researcher knows his or her answers.

**Dyad Compatibility**

The research question for this variable stated, "Is compatibility in the dyad affecting the protégé's satisfaction with the mentoring process?" Study results for this variable confirmed this researcher’s belief that compatibility between mentor and protégé was important for sustainment of the relationship. Nearly half of the participants responded to the agree category that similar compatibilities increased their satisfaction in the relationship for career mentoring. For personal mentoring, it was just the opposite. One-third of participants disagreed. This was puzzling since career counselors admitted they had no mentor to protégé matching system in place. This led me to believe that may be the protégés are compromising on compatibility of their career and personal goals and objectives to those of their mentor. Kram's (1983) mentor theory in this case did support this study's outcome since Kram did not elaborate on how compatibility should be incorporated into a relationship. Program administrators in those squadrons mimic Ehrich et al.'s (2004) findings that correctly matching career and personal goals was difficult since mentors and protégés rotate into and out of a squadron every 2 to 3 years.

It is clear that compatibility characteristics were not being considered in the implementation of mentoring programs for personal mentoring. This was supported by the 33% of participants responding to the disagree category for personal mentoring. The results for this variable indicated compatibility was the most critical element of any
mentoring program. Properly pairing a mentor to protégé was one of the highest priorities for a program administrators. Anything less may be detrimental to the mentoring effort. Program managers, mentors, protégés, and future researchers should be fully aware of the consequences of pairing a dyad who have little to nothing in common.

**Mentor Training**

An unusual outcome of this variable was how pleased protégés were with their mentors even though most received no formal or informal training whatsoever. The research question stated, "Is the mentor's training affecting the protégé's satisfaction in a formal mentoring setting?" Study findings in the career mentoring area suggested squadron mentors possessed ample training to assume this position with 48% of participants responding to the agree category. Only a mere 16% agreed in the personal mentoring area. Examination of this variable did not determine where and how the mentors obtained the necessary training. U.S. Navy instruction NAVPERSCOMINST 5300.1 mandated mentoring take place, but did not provide guidance on how mentors should be trained. This caused a dilemma, especially in formal mentoring contexts where program structuring was so important for effectiveness and longevity.

Despite the mixed responses between career and personal mentoring, the mentors were somehow obtaining the minimum training to assume the position. This was puzzling and more in-depth research is needed to understand just how the training is conducted. The importance of proper mentor training cannot be overstated. It was safe to state that not all persons were capable or wanted to assume mentor positions. Proper
mentor training should be occurring at least annually with follow-up or mentor peers critiquing to ensure mentors are retaining and exhibiting what they have learned.

**Dyad Geography**

The literature review provided little research in understanding how geography affects the mentoring relationship. Some researchers such as Haggard et al. (2011) and Barak and Hasin (2009) touched little on this subject and stated future research should concentrate in this area. The research question stated, "Is the aviation command’s operating and geographic environment affecting the protégé's satisfaction with the mentoring process?" This study's outcome provided a closely related relationship between the agree and neutral responses with scores of 39% and 21% respectfully for career mentoring and 18% for personal mentoring. This was surprising and may be linked to the participants' perceptions of working in just one operating context compared to others. This notion coincided with the literature findings (Allen et al., 2006; Haggard et al., 2011) that formal or informal mentoring programs can be affected by the working environment. This survey did not ask the participants their ethnical background to determine if different cultures affected their perceptions of satisfaction in the career and personal aspects. Cultural differences in different contexts were a main interest in Crutcher's (2007) study. This study was crucial for raising awareness in boundaries that mentoring efforts must cross. Crutcher crossed similar boundaries in terms of operating environments, gender, and ethnicity.

The dyad geography variable in this study provided no real dissimilar data compared to the literature review findings. Participants responded favorably to the way
geographical position affected their satisfaction with mentoring. These data satisfy the question of why consider geography in the first place. Simply, geography affects mentoring by forcing the dyad to adapt, communicate, and interact under unfavorable conditions. In many cases, the relationship must adapt to these conditions for extended periods of time. This should be taken into consideration anytime the dyad has to change operating environments.

**Mentoring Functions**

The mentor functions question provided mixed responses among the participants. This was interpreted from the high number of participants responding to the agree category for career mentoring and disagree for personal mentoring. The research question stated, "Are adequate mentoring functions increasing the protégé's satisfaction in both career and personal settings?" It was possible the protégés had conflicting ideas as to what functions or activities should be accomplished during their meeting sessions. All squadron career counselors reported they had no prescribed activity lists for their mentors to work from. One squadron representative commented they left all meeting activities up to the dyad and did not follow-up on their progress. This verified Kram's career functions of coaching, and sponsorship are not being met. This did not promote or enhance the protégés' chances of excelling in his or her profession and clearly went against the U.S. Navy's NAVPERSCOM instruction 5300.1 of grooming and developing sailors. Sosik and Godshalk (2000) indicated in their study that mentors who provided structure and activities in the relationship would often perceive an increase in job
satisfaction. If military units and organizations want a successful mentoring program, then it has to possess activities to enhance the interests of the dyad.

The study results for this variable indicated that more structure was needed in the personal area of mentoring. This area could be custom tailored on an individual level to meet the need of each protégé or structured to provide personal mentoring for large groups. Data obtained from this variable was extremely important for the cohesiveness of the relationship. A dyad does not want activities to become boring or non-existent.

**Mentor/Protégé Gender**

The research question for the gender variable stated, "Does the mentor/protégé gender make a difference in the level of mentoring satisfaction provided in formal mentoring programs?" Conversations with squadron Career Counselors and Command Master Chiefs revealed squadrons tried to match mentors and protégées to someone of the same gender. Squadron representatives did not elaborate their reasons for these actions, but it may be assumed it was convenience or to make the dyad more comfortable with someone of the same sex. It seemed puzzling why squadrons would try matching the mentor to protégé in this area, but not in general compatibility characteristics. The outcome of this study could not determine whether some same gender dyads are more effective at mentoring than mixed gender dyads. This sentiment was echoed by Sullivan (1993) and her studies into mixed mentoring techniques. The gender variable had the highest proportion of participants respond to the strongly disagree category when asked if the gender of the mentor makes a difference in the level of mentoring provided for
personal enhancement. It was clear the participants felt their mentor's gender would have little if any impact on their satisfaction.

Data obtained from this variable in the personal area of mentoring indicated gender had no bearing on protégé satisfaction whatsoever. This clearly meant military units and private organizations may yield no benefits from their mentoring efforts unless the dyad is properly matched in terms of compatibility characteristics. These results provided an advantage for the mentoring community. First, they assisted program managers to determine if a mixed gender dyad was more appropriate to their needs and achievements of their goals and objectives. Second, study results allowed managers to concentrate more efforts towards the personal mentoring areas.

**Challenging Job Assignments**

This variable's outcome was consistent with the findings from the variable protégé visibility. These two variables worked as a complement to each other. In other words, was the protégé given ample visibility to display his or her skills in order to assume challenging job assignments. The study question stated, "Is the mentor providing challenging job assignments for the protégé for professional growth?" This question was confidently answered by noting 44% of participants responded to the agree category for career mentoring. Participant responses for personal mentoring were just 16%. This variable was highly related to the mentor leadership variable. Data analysis revealed this variable had a major effect on the outcome of satisfaction for just one unit of change in the independent variable mentor leadership. This suggested if the mentor exhibited a leadership style that was conducive to mentoring and appeals to the protégé, then
satisfaction can be expected to increase. Those same results were achieved in studies by Pellegrini and Scandura (2005). Moreover, the outcome of this study variable closely resembled O'Neill's (2005) study in which challenging job assignments were closely linked with protégé visibility.

This variable's outcome showed the importance of being placed in a job position with chances for advancement. There must be a clarification made by the mentor that mentoring will not always guarantee a protégé a better job. What it means is it will improve the protégés' chances of obtaining a position with the proper mentoring in place.

**Protégé Visibility**

The research question for protégé visibility stated, "Is mentorship networking increasing the protégé's satisfaction for career advancement?" This outcome was confirmed by the high percentage of participants responding to the agree category for career mentoring. This outcome was consistent with studies by Southern (2007), O'Neill (2005), and Price (1994). This question targeted visibility in the career mentoring area and not the personal mentoring area. The reasoning for this was the protégé would be in a more appropriate position to market his or her talents and skills away from the workplace. There were no extreme deviations in the participant answers. Forty six percent of the participants agreed their mentor afforded them the necessary visibility and networking opportunities to advance their careers.

This variable's outcome was closely inline with challenging job assignments. Study data led me to believe that it was easier to provide visibility in a career setting versus personal contexts. This may be due to the fact that career mentoring occurred
during working hours. It may be more difficult to provide protégé visibility for personal purposes because protégés may feel uncomfortable with a mentor infringing on their privacy. This was an area of mentoring that should be explored in-depth for more practical data to be used in the field. It is worth noting that visibility may be important for mentoring purposes. The first reason is to give the protégé a feeling of self-worth. This was interpreted as showing the protégé they were important and an integral part of their organization or military unit. The second reason is to provide confidence in the protégé in the pursuit of a career outside the military.

**Mentor Leadership**

This variable provided no real noticeable deviations from the other study variables. Nearly half of all participants responded to the agree category for this variable. The research question stated, "Does the mentor's leadership style influence protégé satisfaction in the career, advancement, and development phases of the mentoring relationship?" The results suggested squadron mentors possessed the appropriate leadership attributes to increase learning in the protégé’s career area, but not the personal mentoring area. This did not, however, suggest the mentor's leadership style was appropriate to each specific protégé or under different contexts. This study did not evaluate the mentor's transformational or transactional leadership attributes to determine if it was the right approach for mentoring. Godshalk and Sosik (2004) noted career and personal support should be a goal of the mentors and the leadership style is crucial to this development phase. It was not evident if mentors used a hybrid approach of transformational or transactional leadership characteristics in their relationships.
A critical piece of data missing from this study was how the mentors are receiving their training. The study participants' reported their mentor possessed adequate leadership attributes, excluding the personal area. It was possible the mentors may be applying leadership skills they acquired earlier in their careers from military leadership schools. This however, did not mean these acquired skills can be applied to a mentoring position. So what does this variables outcome mean for mentoring? It suggested administrators and mentors should not overlook just one area of mentoring. Concentrating in one area and neglecting the other will certainly lead to problems.

**Time Management**

A surprising outcome of this variable was the low response rate for strongly disagreeing. Only 3% of participants disagreed, but an astonishing 47% agreed for career mentoring. The personal area for time management followed a similar pattern like previous variables. Alternatively, the participants' responded favorably for stating their mentor was organizing their meeting frequencies in a timely manner despite arduous work schedules and deployment cycles. The research question for this variable stated, "Is time management between mentor and protégé a factor in the protégé's satisfaction with the mentoring process?" Study results suggested protégés were happy with their meeting frequencies in the continental United States and abroad. This finding was contradictory compared to studies by Crutcher (2007) and Feeney and Bozeman (2008) who found irregular meeting frequencies hampered mentoring relationships.

What was interesting about this variable was that dyads were finding time to meet despite difficult work schedules and long deployment cycles. Squadron representatives
made no comments on how this was occurring. Once again, the participants responded unfavorably in the personal mentoring area. These negative responses may be due to the mentor providing only enough time to accomplish the career functions while disregarding all personal activities. The testing of this variable was important in understanding how often dyads should meet regardless of formal or informal programs. Future research into this variable's area should yield data to assist administrators and mentors in the importance of meeting on a scheduled basis.

**Protégé Expectations**

Study results for the protégé expectations variable differed drastically from the other study variables. The study question stated, "Is there a relationship between protege career expectations and their satisfaction in formal mentoring settings?" Findings for this variable provided nearly identical responses across the strongly agree, agree, neutral, and disagree categories for career and personal mentoring. What was unusual was no participants' responded to the strongly disagree category. For this reason, answering the research question was difficult to interpret. Data indicated the participants were not satisfied with their formal mentoring relationships. This may be due to compatibility problems. Another view to consider was whether the participants viewed their mentoring relationships as just another supervisory-/ subordinate relationship. This same problem was noted in a study by Mertz (2004). Lastly, the ability to drop out of the mentoring relationship caused dispersion of the answers. U.S. Navy members were mandated to participate with no option of withdrawing. This approach may have drawn negative perspectives or resentment of their programs on the participants part.
Conclusions drawn from this variable's outcome suggested the U.S. Navy's mentoring program needs restructuring at all levels. This included decisions on whether to convert to an informal format, or stay with the formal process. It was clear the protégés were searching for something more out of their mentoring experience. Their answers to the survey questions revealed several things were lacking in both career and personal areas. It was possible the combination of all the study independent variables may be the cause. If this is the case, then redesigns in their programs would have to eliminate these factors and isolate other factors not considered.

**Recommendations for Action**

Mentoring is a field to groom or develop a person in order to fulfill career and personal ambitions, goals, and objectives in not only military mentoring, but private sector organizations as well. If an existing mentoring program could be improved in these areas, then protégés could be expected to respond in a more positive manner. Despite receiving a majority of agree marks for each study variable, the U.S. Navy's mentoring program could use improvements in each variable area, preferably personal mentoring. For this reason, mentoring program managers could strongly consider restructuring their programs to increase effectiveness. This section identified possible solutions to increase overall satisfaction in the mentoring effort. These were merely suggestions and further research was needed to generalize if they are effective.
Dyad Compatibility

The compatibility research question stated, "Is compatibility in the dyad affecting the protégé's satisfaction with the mentoring process?" Compatibility between the mentor and protégé was a major concern for cohesiveness and longevity in the relationship. Study results revealed adequate compatibility between mentor and protégé was occurring for career, but not personal mentoring. Several participants stated that compatibility in matching mentor to protégé was never even considered at their squadron. One participant responded she had nothing in common with her mentor and they constantly argued about career and personal goals and objectives. Disputes such as this in the dyad simply undermined the reasons for having a mentoring program in place.

A strong recommendation would be to have a database in place to properly match mentor to protégé. Past studies by Ehrich et al. (2004) and Haines (2003) revealed a database with common characteristics often resulted in a more effective relationship in terms of satisfaction. This database would contain categories in both career and personal areas of mentoring. The career mentoring area could contain characteristics common to the dyad in terms of advancement in the protégé’s current and future job assignments. For the mentor, characteristics could include similar values for career growth, enhancement, and developing leadership and management skills. It was important these functions be separate from personal mentoring. In the personal mentoring area, characteristics could include common activities and functions external to the protégé and mentor’s working environment. This could include: (a) sports, (b) hobbies, (c)
volunteering, (d) continuing education opportunities, and (e) collaboration projects with peers.

Properly matching mentor to protégé did have policy implications. First, it required establishing a database upon which to draw similar characteristics. This required input from multiple sources as to what characteristics should be included. There was a chance bias may occur or rejection of database items that may cause resentment or even retaliation. In addition to this, program administrators could face accusations of favoritism. This stemmed from the fact that some mentors in upper level positions may use their clout to unfairly provide advantages for their protégés. This could be addressed in the early phases of the program design.

Mentor Training

Program administrators should take considerable time to evaluate how they will train their mentors to assume these critical positions. A mentor who was not properly trained to lead and support another person can have detrimental effects for the protégé. This was evident in studies by Mincemoyer & Thomson (1998) and Udeh and Omar (2009) as well as a military study by Sullivan (1993). A person must have a desire to be a mentor. If he or she was forced into this position as mandated by the military unit or organization, then negative program results can be expected. Military members may be given the option of becoming a mentor. This position should never be mandated. NAVPERSCOMINST 5300.1(2009) directed all naval commands to establish and operate a mentoring program. It did not, however, suggest or direct on how the training of mentors should be accomplished. After talking with squadron CMC's, it was
discovered that nearly all squadrons had no formal or informal mentor training programs in place before assigning them a protégé. What was more alarming was the high number of responses to the agree category for career mentoring when asked if their mentor was adequately trained for such a position.

This variable played a role in the cohesion of the relationship. It was futile to assign a mentor with limited to no experience in this field. Program managers do have options in this area that will better prepare the mentor in meeting program goals. The first recommendation is to seek assistance from organizations who specialize in this training. Community organizations such as Kessler Mentoring and Take Stock in Children specialize in mentoring and have assisted military units in the Jacksonville, Florida area. If a mentor successfully completes an established mentoring training syllabus, they may be given the option of participating in the program.

Training of mentors may come at a cost to military units and private organizations. To receive professional training, outside sources must be used, which could affect an organizations operating budget. These costs whether on initial implementation of the program or recurring training may be a factor in the design of the program. The quality of the mentor training can have implications as well. Mentors may face substandard teaching techniques that may bore them or may not be tailored to their individual leadership style. The last implication that may affect mentoring at a military unit was the projected transfers of member out of a command. When mentors rotate to another command or exit military service, they take their training background with them. This definitely benefited the new command and even organizations they may work for,
but it leaves a void at the previous command. This in-turn caused commands to recruit additional outside services for initial training. Once again this will tap into financial resources that maybe scarce. This variable in itself may be the biggest financial obstacle to establishing and maintaining a mentoring program.

**Dyad Geography**

The context under which the relationship cultivates had an influential effect. I fully expected the dyad's location to have a major effect on the protégé's satisfaction in this study as well. This was not the case, however. Only 40% agreed geography played a pivotal role in their relationship for career mentoring compared to 14% for personal mentoring. Location was a critical element in prolonging and sustaining mentoring relationship ties. Consideration may be given to the context under which the mentoring will take place. If a military unit or organization is conducting business or operations in an environment with adverse duties or extended work cycles, then it is possible mentoring cannot take place. These distractions must be eliminated or minimized if possible. An example of this was found in studies by Haggard et al. (2011) and Crutcher (2007) where mentoring distractions was reported by a majority of study participants.

Mentors, protégés, and mentoring program managers have the option to evaluate the environment their program will take place in before establishing or revising current programs. For example, it was difficult to conduct mentoring if a military unit is operating in adverse or hostile regions. For communities and business organizations, it may be more comfortable for mentoring to take place away from the workplace. This will eliminate the possibility of supervisors and coworkers exerting stress on the
relationship. Military units could evaluate if starting or continuing a mentoring relationship is feasible due to future deployments. Meeting frequencies in the dyad in time such as this may be limited or delayed for extended periods of time. Deployment readiness will always have a high priority for military units. An alternative view to this is to find ways to use mentoring to enhance readiness. This is where mentoring has an advantage. Program managers could tailor meeting sessions to coincide with non-deploying work periods when the military unit is operating at home. Mentors could also provide tasks or training to protégés on how to perform work duties under different geographic regions.

The operating environment posed implications to mentoring policies on a different level. First, military units that deploy often will have to find a way to keep the mentoring effort active. This means no matter how arduous working conditions maybe, mentoring must continue. Geography also played a role in the replacement of mentors. Mentors who transferred out during deployments eventually have to be replaced. This meant a protégé would go without leadership and guidance for extended periods of time. This variable also tied into costs. It may be impossible to train a mentor when deployed.

**Mentoring Functions**

It was not revealed what career and personal activities were occurring in the dyad. This study did not inquire about the functions taking place when the dyad met. The number and classification of functions was too numerous to identify in this study, but the study results suggested the dyads were finding means to accomplish their goals and objectives. A comprehensive review of the literature into mentoring revealed dyads often
faced uncertainty concerning the activities occurring when mentor and protégé met (Ehrich et al., 2004; Pellegrini & Scandura, 2005; Sosik and Godshalk, 2000). Results from this study produced a similar outcome in terms of uncertainty by the unusual high number of neutral responses for both career and personal mentoring. The mentor functions research question asked, "Are adequate mentoring functions increasing the protégé's satisfaction in both career and personal settings?" While most participants agreed their mentors provided adequate activities during their meetings, a high number also took a neutral stance on this position. Comments on the surveys for this variable included: (a) non-existent, (b) too few activities provided, and (c) not relevant to my career needs.

A strong recommendation in the career mentoring functions area was to establish a common list of activities unique to that organization to assist the mentor and protégé in the performance of their duties. This list may vary among military units and organizations, but the activities will be career enhancing and relevant to their field of work. For career related purposes, it is highly recommended mentoring programs include activities that are structured and applicable in meeting the mentors and protégé's workplace goals. This includes implementing tasks to increase job knowledge, skills, and competency. This approach will provide reciprocity between mentor and protégé and link the activities to typical work duties.

The personal mentoring functions area will be more difficult to implement due to personal differences and beliefs. This can, however, be overcome by having the mentors and protégé's discuss hobbies away from the workplace that may complement each others
endeavors. Activities to increase satisfaction in personal settings will depend on the individual goals of the mentor and protégé. This will require openly sharing ideas and beliefs on what is important to each other. This transparency may foster new ideas and expose resources the other person may not have considered. Communication in the dyad is key for discovering new and innovative ideas. The outcome of this study indicated personal mentoring was non-existent among participating squadrons.

Activities can strongly influence mentoring policies by the use of dyad feedback. Inappropriate or non-relevant activities could force the mentor and protégé to report in a negative manner. These negative connotations could force program administrators to pause mentoring efforts while restructuring takes place. Negative feedback can also label the mentoring program as useless or a way to get out of work if it happens to occur during working hours.

**Mentor / Protégé Gender**

It is strongly advised that military units and private sector organizations establish mentoring relationships with feedback from the mentor and protégé on how important gender is to them. Properly matching mentor to protégé is just a broad area of compatibility. The composition of the dyad has shown to be a strong predictor of success and must be considered as well. The literature review also showed gender to be a strong catalyst in the success of the relationship (Okurame, 2008; Young and Perrewe, 2000). A small fraction of this study involved a mixed dyad, but it provided valuable insight into the potential of mixing gender in a relationship.
If an organization decides to allow mixed gender dyad relationships, they could first ask mentors and protégés if they feel comfortable with this arrangement. Mandating a mixed relationship may invoke resentment or fear of talking openly with someone of the opposite gender. If a preference is made to have a same gender mentor or protégé or mixed relationship, then program coordinators should strive to correctly match the dyad. Kram (1983) identified this as a major limitation in her research and it seemed to be a limitation in this study as well. This preference could occur in the early phases of the relationship. Matching of the gender could be a part of the compatibility process. A mixed gender dyad may cause apprehension and insecurity and limit the chances of the relationship developing. Past study results by Okurame (2008) and Weinberg and Lankau (2010) were closely inline with the results of this study.

The disproportionate number of males to females in military units had a significant effect on this study. Some squadron participating had an unequal amount of males and females. This meant the dyad pairing in some military units had to be a mixed gender, which caused intimidation. This reason alone may cause participants to withdraw from the mentoring program. Mixed gender group mentoring was found by O’Neill (2005) to be highly successful because of the encouragement offered by male and female peers. A simple solution around this problem may be to implement group mentoring if necessary.

**Challenging Job Assignments**

A clarification must be established between mentor and protégé in the early phases of the relationship to establish goals and objectives both wish to achieve.
Midcourse guidance or feedback may be given on a timely basis to ensure goals and objectives are on track to be met. A written contract could also be drafted between mentor and protégé. This will ensure the dyad is satisfied at each phase in the mentoring process. These phases were identified by Kram (1983, 1985) as: (a) initiation, (b) cultivation, (c) separation, and (d) redefinition phases. The dyad could divide their mentoring relationship into these same four phases and develop a plan on what is to be accomplished in each.

In the career mentoring area, the mentor, program manager, and the protégé's chain of command could evaluate what job assignments and collateral work-related duties are open and then closely match the protégés mentoring to meet those specific jobs. This will require an extensive review of the organization's job infrastructure. Military members may find it difficult to find jobs and tasks to increase protégé satisfaction. They may not have the authority to train protégés in new career areas. For this reason, it was advisable to find mentoring activities closely related to jobs the protégé has a passion or interest.

Personal related functions will differ from career mentoring areas. The purpose of these functions was to prepare the protégé for future job assignments and hobbies external to the military or organization. The mentor should be accepting of the protégé's desires of post-military life. Mentoring in this area could include encouragement and constant feedback from the mentor when the protégé expresses desires to explore civilian job opportunities. The mentor could strive to comprehend the protégé's personal aspirations and provide appropriate feedback when necessary.
This variable's outcome had potential benefits for mentoring policies in the military and civilian sector. The first benefit was it allowed protégés to compete for job positions that maybe limited. Protégés have the ability to be mentored for jobs requiring additional skills and knowledge. This may reduce operating costs and the workload involved in hiring new employees. For the military, it meant members are highly trained, which increases unit readiness.

**Protégé Visibility**

A mentor can provide more than just friendship and counseling, they also have the opportunity to showcase a protégé's talents and skills and prepare them for possible future job assignments they maybe qualified for. A strong recommendation in the career mentoring area for this variable was motivating the mentor to find job related tasks that promoted or highlight the protégé's abilities and skills. Mentors could work closely with mentoring program managers to ensure protégés are given a chance to be exposed to new work related areas and responsibilities. This may require coordinating with military unit commanders to obtain the necessary permission. The personal mentoring area of protégé visibility may be tougher to accomplish than the career area. First, mentors could encourage protégés to find ways of transferring their military knowledge and motivation into initiatives that will assist them in accomplishing personal goals such as obtaining a college degree.

Visibility played an important part in the program and not just for the protégé. First, the mentoring program needs to be recognized as a beneficial tool to the command. The paradigm that it was just another mandatory program needs to be changed. Visibility
can have profound benefits for a command by showcasing the talents of its workers. The hidden potential of the workers can be revealed and, in some cases, used in positions normally filled by more experienced workers. Private sector organizations may yield enormous benefits by using the newly discovered talents to fill lucrative job positions, which in-turn could increase profits and productivity.

**Mentor Leadership**

Mentor leadership was another variable that was highly related to other study variables. The mentor leadership question asked: "Does the mentor's leadership style influence protégé satisfaction in the career, advancement, and development phases of the mentoring relationship"? Forty-four percent of study participants agreed mentor leadership was highly important in the relationship for career-related purposes, but a majority found leadership lacking in the personal area. This paradigm was consistent with studies from Diagne (2008); Jacobi (1991); and Wilks (2008). To begin with, program managers could evaluate their potential candidates for mentor positions and determine if they possessed effective leadership skills. Determinations could include if the candidate has led teams in the past or if the candidate has attended any leadership development classes. Evaluations could also include whether the potential mentor has adequate social and interaction skills with others.

The literature review on mentor leadership provided insight into common leadership traits (Wilks, 2008) as well as adapting those to meet protégé needs (Hickman, 2010). However, little was mentioned about how it may affect program policies and procedures. This study's outcome revealed mentors were exceeding expectations in the
career area, but faltered when it comes to personal mentoring. This suggested more program structuring was needed, particularly in terms of selecting mentors who utilize various leadership styles. This may be a problem for most military commands and organizations because of the difficulty in analyzing a person's leadership traits.

**Time Management**

This variable was affiliated with the dyad geography variable and played a role in the protégé's overall satisfaction with the other variables. It was imperative the dyad meet on a regular basis to cultivate trust in the relationship. The mentoring relationship has to begin with establishing a schedule that is acceptable to both mentor and protégé. This meant planning a meeting schedule that does not duly interfere with assigned work or infringes on the personal lives of the dyad. Whiting and Janasz (2004) stressed the importance of planning and organizing in their study regardless of geographic locations.

The time management research question asked, "Is time management between mentor and protégé a factor in the protégé's satisfaction with the mentoring process?"

Nearly 47% of participants agreed their meeting frequencies with their mentor was adequate. Despite being a relatively high rate, responses could be increased if squadrons and private sector organizations enforced more stringent and formal meeting sessions. McKimm et al. (2007) found in their study that strict adherence to scheduling is key in the relationship. This same approach could be applied to future research endeavors. Establishing a calendar of monthly meeting sessions is the first step in the mentoring process. There are no established guidelines on how many times the dyad should meet on a weekly or monthly basis. Fifteen to 20 minute sessions were recommended by Whiting
and Janasz (2004) and 30, 90, 120, and 270 day cycles were recommended by Navy Personnel Command Strategic Communications (2003). These were just recommendations and will depend on the work schedules of the dyad. Both career and personal agendas may be discussed at these meetings with feedback and follow-up occurring on past meeting sessions. If scheduling conflicts occur often, then virtual mentoring may be a viable option for the dyad. The literature review on this concept found this an easy way to communicate when formidable work schedules and vast geographical distances separate the dyad. This virtual concept of mentoring may be the most effective means of mentoring for the U.S. Navy. Mentoring during upcoming deployments can be simplified by simply using e-mails and teleconference calls. Private organizations may find virtual mentoring easier and more accessible than military units. Quick access to the Internet coupled with large data bandwidths will allow dyads in these organizations to reach each other with ease.

Time management was not only limited to just the mentor and protégé, it affected all members of the military command and organization. Time management affected program policy by forcing program administrators to allocate mentoring time during working hours. One squadron program administrator in this study commented he often had to allow mentoring sessions to continue only after flight operations ended. This was a cumbersome task and will certainly affect productivity of any organization. If a military unit and organization are operating under a formal program, then it is quite possible they are being mandated to participate, which will most likely cut into their working schedule. Problems such as this may be compounded if the military unit is
deployed to hostile regions or if the organization is falling behind at work and cannot spare to have employees away from their jobs. Situations such as this must be taken into consideration.

**Protégé Career Expectations**

The outcome of this study revealed protégés were not satisfied in the area of career mentoring compared to personal mentoring efforts. The difference in responses for the career and personal survey questions varied significantly. One aspect of every mentoring relationship would be to end the relationship on good terms with the dyad satisfied they have met all defined goals and objectives. Termination of the relationship according to Kram (1983) should terminate on a positive note with both parties feeling satisfied all goals and objectives were met. The key point here was to identify early in the relationship what the mentor and protégé expected to gain or achieve from the mentoring experience. This fell closely inline with Kram's four phases of mentoring that included: (a) initiation, (b) cultivation, (c) separation, and (d) redefinition. These four phases could be addressed in the dyad and what goals and objectives should be accomplished in the beginning. There could also be constant feedback at the end of each phase. Once again, communication becomes a critical element in the relationship.

The protégé's overall satisfaction with his or her mentoring experience can have implications outside of the command or organization. A protégé that exits a bad relationship may be hesitant to participate in future mentoring wherever he or she may work. There was also the possibility the protégé was reluctant to mentor for non-profit organizations such as Take Stock in Children and Kessler Mentoring, which boost
community relations. It was imperative the dyad complete a mentoring relationship on good terms and take away something positive from the experience. Kram (1983) described this last step as redefinition and stressed it as possibly the most important. Program administrators and mentors should strive to achieve a positive experience and environment if possible for the protégé. From beginning to end, each phase needs to meet or exceed expectations for everyone involved.

**Recommendations for Further Study**

This study's outcome provided data to support the need for more training and program restructuring in the personal area of mentoring. It was clear that a significant difference exist between the career and personal mentoring areas. A majority of participants reported unsatisfactory responses, strongly disagree and disagree to all 10 survey questions for personal mentoring. These findings warranted further research into finding ways of increasing personal satisfaction by identifying characteristics common to both mentor and protégé. Establishment or restructuring an organization's mentoring program needs to take into account the unforeseen circumstances that were not defined in the beginning phases. It was possible problems arose in their programs due to external factors identified in this study.

**Dyad Compatibility**

Research from this study has shown that compatibility was the most crucial component to any mentoring program. Future research into formal mentoring programs should begin with compatibility problems that may affect the dyad. It may be that organizations and military commands will adopt a formal mentoring program approach,
but neglect to create a database based on compatibility. Therefore, future research into this field should start by examining the differences between informal and formal programs based on compatibility. Future research could concentrate on which approach, formal or informal is best for the military unit or organization. Program structuring and design can begin once a determination is made. Another area of compatibility that could be researched in-depth is whether the organization has the potential to generate a matching system. This may require input and feedback from multiple personnel who may disagree with components or characteristics of the matching system. Compatibility matrixes could be developed as the most effective tool for program administrators.

Mentoring policies can be directly affected by the compatibility process in terms of costs. Research could focus on how possible costs of establishing a matrix database will affect the organization. Developing a database will require a large number of personnel working hours as well as the use of resources such as the Internet and software. Costs can also be incurred by the use of pre-testing the database before implementing it. This will require a test group and time allotted for feedback and revisions. These end costs may not justify the means.

**Mentor Training**

A strong research interest could be placed on finding ways to train perspective mentors before they assume the positions. This might include finding local organizations that can provide the necessary training that is tailored to that specific organization. In order to improve mentor training, research could be conducted along the lines of online or virtual mentor training. Future examinations could evaluate the content of
possible training in this manner and if it would be effective and convenient for the mentor at work or at a place of their choosing. It would be advantageous to the mentoring effort if the dyad could change their meeting locations. Past research (Foster, 1999) indicated virtual mentoring was an effective tool for the dyad. The Internet was available to the U.S. Navy and can be used by personnel on a daily basis. Mentors and program managers could take advantage of this and find additional training from online sources. If virtual techniques worked in this manner, then it is possible to train a mentor in the same fashion. Future research could support this by an examination of costs associated with online training compared to traditional classroom instruction. Organizations may find online training offers more flexibility for the mentor and allows them to train at their own pace. Training costs may also play a factor as well. Future research may find that it is cheaper to train online than hiring a professional mentor to visit the establishment.

Some administrators may question will the command or organization benefit from training their mentors. In other words, does the end justify the means? This will depend on the quality of training provided as well as how receptive the mentor is to be trained. A mentor with a poor attitude or one who does not employ what he or she has learned will be of little value to the mentoring effort. It is important for future research to examine the mentors teaching and coaching abilities before and after the training has been provided to really understand if the mentor is capable of leading a protégé. This can be easily accomplished by talking with the mentor to see if he or she is more confident in their duties and if they personally feel training has helped.
Dyad Geography

Future research into geographical mentoring could focus on minimizing distractions that diminish the mentoring effort. This would include conducting mentoring sessions away from protégé's work center. Meeting sessions could also be conducted in established meeting rooms that are quiet and confidential. Research could evaluate whether mentoring is more effective when conducted at the workplace or at an alternative establishment picked by the dyad. During collection of the surveys, some participants commented their relationship with their mentor could be improved if conditions were more conducive to mentoring.

Research into this variable needs to consider mentoring in two separate areas. One, mentoring in the workplace and the distractions involved. Mentoring at work offers relative convenience and could be accomplished before or after working hours and even during breaks. Two, mentoring in private settings. Offering the dyad privacy during sessions can alleviate the stress imposed by supervisors and co-workers. Privacy gives the dyad more time to plan and discuss their career and personal agendas. Future research could question participants if they would feel comfortable about mentoring in the absence of others.

More data was needed in the geography area to determine if mentoring in unfavorable conditions is a benefit or hindrance to the mentoring effort. First, consider an outside advantage of mentoring in a geographical area away from the dyad's norm. Mentoring instructions learned under these contexts could teach the dyad to be more
efficient in time management of their meetings. It may also enable the dyad to display leadership traits on the mentor's part as well as untapped work skills from the protégé. Conditions such as these may allow the dyad to train to meet their working environments. This may increase job efficiency for the organization.

**Mentoring Functions**

Burris et al. (2006) noted activities and functions during meeting sessions often add stability and longevity to a relationship. This is an area that is missing from the U.S. Navy's program. Research that is more extensive to this area could include inquiries into activities or building exercises that strengthen the relationship between mentor and protégé. This could include research that concentrates on activities that have a direct influence on the protégé’s immediate career and personal achievement. Researchers could consider studies that addresses activities occurring in both career and personal mentoring areas. Both formal and informal contexts could be included as well.

Other research efforts could focus on the virtual aspect of mentoring. This can include the development of online activities the dyad can perform together to build skill sets and increase cohesion in the relationship. These online activities need to be relevant to the protégé's job in terms of career development. Future research information was needed to address issues such as activities that may occur while the dyad was working in different geographical regions. This may be prevalent if the dyad is using virtual mentoring sessions with the mentor and protégé located some distance from each other.
Mentor/Protégé Gender

Future research into this variable could include qualitative one-on-one case studies to fully understand why gender was so important in the relationship. The study data was insufficient and further studies are needed to understand the gender characteristics common in both mentors and protégés and whether a relationship exist. An effort must be exerted to determine the advantages and disadvantages of mixed gender mentoring. This may require a qualitative longitudinal study in cooperation with the military units, organizations, or professional mentoring services. A qualitative study would be most effective to understand variables affecting the relationship.

More in-depth research studies are needed to determine if protégé success will increase if paired with the same or mixed gender mentors. This will require the protégé to be paired with both a male and female mentor for the same amount of time and the same functions being applied. This will require a study of prolonged length to accomplish. These are just two of many factors that must be considered. There is also the difficulty of designing two identical studies under the same conditions.

Future research into dyad gender may cross boundaries into socialization, which is beyond the scope of this study. This is not to say it was not important. In fact, data from this study has shown that gender can make a difference in the perception protégés have for their programs. An increased effort could be directed towards understanding if a mixed gender dyad was more capable of accomplishing goals and objectives compared to same sex dyads.
Challenging Job Assignments

Future research could evaluate whether mentors are being proactive in their appointed role. This first requires getting to know their protégé’s strengths, weaknesses, and skill sets in order to promote or train them to assume fulfilling jobs and duties. Second, future research could test whether mentors are instilling confidence in the protégé if they are to undertake these demanding roles. Like the gender variable, more research will be required to determine how a mentor can position his/her protégé to receive additional jobs. This will require research that gathers data directly from the program managers and mentors. These individuals are in a better position to collect organizational information. Simply giving a protégé the opportunity to assume a job position may not be a clear indicator of satisfaction. More investigative work was needed for this variable. Follow-up research could be beneficial to affirm the protégé is confident after being mentored for a possible position.

Protégé Visibility

Visibility for the protégé was closely related to challenging job assignments. It is unclear why these two variables are related, but future research into this area may determine the advantages of career mentoring a protégé in an organization. There may be obstacles to get a protégé noticed such as competition with other protégés. Researchers could work closely with program managers and ask why a mentoring program is necessary. Is it to benefit the military unit or organization? Will it satisfy requirements or standard operating procedures? How will it benefit the mentor/protégé in the end? These were just a few questions that could be clarified in the beginning phases. Research
interests could also concentrate on finding ways to display the protégé's talents and skill sets. This could be accomplished by soliciting ideas from mentors in the field who know the protégé best. These recommendations could also be used in revisions to their programs.

Mentor Leadership

The results from this study proved mentor leadership was a variable that exerted a strong influence on the relationship as well as other study variables. This study’s outcome closely resembled Burke's (2008) study in which a mentor with the wrong leadership characteristics can have detrimental effects on the mentoring process. Data obtained from this study could benefit military units and organizations in the development of in-house training programs. Programs such as these could be individually structured to meet that organization's needs. Research efforts could also focus on mentors attending leadership courses that are tailored to leading subordinates. In this study one participant commented her mentor had no experience in leading workers and showed little patience when planning goals and objectives. A properly trained mentor could alleviate problems such as this.

An alternative research approach would be to have an external agency that specializes in mentoring provide training to mentors and identify their leadership weaknesses. Organizations such as the YMCA, Take Stock in Children, and Kessler Mentoring will provide mentoring specialist to assist an organization in their mentoring efforts. Research in this area could include finding ways to integrate this training into
busy work schedules. This would minimize the responses from participants of not having enough time to participate.

The last area and possibly the most important research endeavor is identifying the appropriate leadership style the mentor must possess to facilitate mentoring. This will require extensive testing over a longitudinal period to evaluate different leadership styles such as transactional and transformational. Researchers must be able to test a mentor's leadership style in a variety of contexts. This may require testing while military units are on deployment or operating in hostile regions. This in itself may require considerable field testing and even the use of control groups.

**Time Management**

Administering and retrieving the surveys from the participants revealed a problem that was common with the mentoring process itself and that was effective time management. Participants commented completing the surveys at their place of work sometimes disrupted them from their duties. Completing the surveys at their homes proved to be a bigger task with distractions from family members. Future research into time management practices could evaluate whether longer or shorter meeting schedules are helping or hindering the relationship.

Future research could include studying whether meeting sessions should occur during morning or evening hours and whether meeting at the dyad’s place of work or home would be beneficial. The literature review on time management provided little data if it is important to the relationship. There was no concise agreement on how long and how often the dyad should meet. Future research could also include qualitative case
studies to observe dyads in their choice of meeting times and places. A qualitative approach will give the researcher detailed data about what is and what is not working with meeting frequencies.

Cost will certainly be incurred to operate a mentoring program. These costs will be more pronounced if the meeting sessions occur during working hours. Studies could include a cost analysis to determine the cost per man-hour for the mentoring meetings. These costs should be a factor in the overall design and operation of the program.

**Protégé Career Expectations**

Future research endeavors should concentrate on examination of the different phases of the mentoring relationship and if each phase is meeting the satisfaction of the dyad in both the career and personal areas. Future examinations could include before and after interviews with the protégé in each phase to determine if their goals and objectives were met.

Research could also focus on determining the underlying goal of establishing a mentoring program in the first place. One could question the organization's mission statement concerning mentoring practices and if the goals are to satisfy upper-level management or the dyad itself. Simply satisfying management may be a requirement to have a program in place, but that may be nothing more than a simple pen and ink change. Management needs to have a passion for mentoring. This means developing their workers to enhance their careers as well as their personal being. The researcher could also determine if the goals and challenges are challenging, but attainable. Completing
each goal should give the dyad a feeling of accomplishment and at the same time instill confidence they can do more.

**Social Change**

Results from this study indicated the protégés were partly satisfied with their mentoring experience. These results promoted or enhanced awareness in social change in two main areas. The first area involved increased military training for service members in all military branches. It is unlikely the U.S. military will transition their mentoring programs from a formal to an informal structure. In lieu of this, data obtained from each of the study independent variables may be used to improve existing programs. Military units can accomplish this by examining and evaluating the context under which their mentoring programs are operated with results from this study. This mentoring training may or may not yield benefits to military units, which will affect current mentoring policies. These implications may affect future funding to continue the mentoring effort.

The second area of social change occurred in the private sector and communities external to the military. It was anticipated mentors and protégés will apply their knowledge and mentoring experiences to mentoring opportunities they may have during or after their military service. This may include mentoring for professional organizations or even starting their own mentoring service. Prior military members could even provide mentoring efforts abroad to developing countries and communities. This may have profound policy implications for organizations such as locating resources and funding to place these potential mentors into the communities. Another implication may be the
context under which the mentoring will take place. Private sector organizations and communities may be reluctant to mentoring from ex-military members.

**Conclusion**

It is clear there are many challenges facing program managers in both the military and private sector. A goal of undertaken this quantitative study was to answer 10 research questions concerning protégés satisfaction with his or her mentoring experience in a formal mentoring environment. Several revelations were revealed concerning the inner-relationship between the variables as well as how satisfied the protégés were regardless of inadequacies in mentor training and mentoring activities.

An interesting find in this study was how responsive participants were to the agree category. All 10 independent variables exhibited similar response patterns for the career question. None of the independent variables displayed a high number of disagree or strongly disagree responses except for personal mentoring. This was an indication the formal mentoring approach was partly effective in the naval aviation area.

An area of concern in this study was how the mentors were trained for this position or if their leadership style is appropriate for mentors. It stands to reason if a program is put into place that affects employees, then some type of training should be implemented. Professional mentoring training can be supplied by organizations such as the local YMCA, Kessler Mentoring, and Take Stock in Children, but military units must take the initiative to solicit their assistance. This approach may be feasible if the military unit is operating at their own home base, but difficult if operating outside the continental states.
The military unit's culture had a strong effect on the participants. This study was conducted in the aviation field while omitting the surface (ship), sub-surface (submarine), and special forces fields. Future mentoring studies into this field may produce similar or higher protégé satisfaction rates due to different program structuring. Military units as well as private sector and local communities should closely consider the goals and objectives of their mentoring programs if they are too train protégé's in the performance of their duties.

Flexibility was key to sustaining a mentoring relationship. No matter how well planned a mentoring program is structured, there will always be unforeseen factors affecting the outcome. A part of this study that was particularly noteworthy was how small changes in the independent variable would affect the outcome. Half of the study independent variables played a significant role in predicting protégé satisfaction when tested individually with simple regression. This gave mentoring program managers a strong tool to comprehend how their own programs will perform when influenced by similar factors. Program managers could consider the consequences of varying one or a combination of these variables.

Distribution and retrieval of the test instrument indicated the study had an additional use besides measuring protégé satisfaction. Several command managers indicated the study responses allowed them to quickly assess their command's mentoring program for effectiveness. In one command, it was determined the mentoring process was breaking down and was nothing more than a paperwork drill to satisfy upper level management. This breakdown could be construed as negative or a hindrance to the
mentoring effort. This may in turn induce negative attitudes despite the fact that career mentoring was a satisfaction to the protégés. From this standpoint, it was easy to see the test instrument provided structural feedback for program managers. This feedback could easily be used to revise current programs to achieve the desired outcome military commands and private organizations are looking for.

Despite mixed responses between the career and personal areas of mentoring, the study concluded that more focus should be given to the personal area. This is not to say that mentors should dictate what a protégé should accomplish in their personal time, but, rather, encourage the protégé to pursue goals advantageous to them. One plausible reason personal mentoring is not effective in the formal context is that protégé personal achievements are not being addressed at dyad meetings. Comments from study participants suggested little to no program infrastructure had been developed in their squadrons to meet personal mentoring needs. This in itself is an entirely new problem to the field of mentoring. Kim and Egan (2011) discussed in their study that personal mentoring was lacking between mentors and protégés. This study exhibited similar traits in that mentor and protégé may be unsure as to what should be occurring when discussing personal agendas.

Establishing personal mentoring functions in a formal context is more difficult than informal conditions. First, it may be unreasonable to demand a dyad to perform personal functions established by a military command or private organizations. It is futile to try and dictate personal mentoring functions that should occur. The military unit or private organization may have the upper-hand in a formal career setting, but personal
mentoring accomplishments should be the protégé's choice. Second, establishing personal compatibility characteristics maybe too numerous to attempt. It was clear that compatibility played an important role in the mentoring process. Protégés responded with great negativity in being matched on career and personal characteristics.

Overall, the study provided considerable insight into formal military mentoring practices and its effectiveness at developing U.S. Navy sailors. In summary, mentoring program managers faced considerable obstacles when establishing or revising their own programs in formal contexts. Considerable foresight must be given to the structure of their programs and what goals and objectives they wish to achieve. These goals and objectives could be challenging, but attainable for both mentor and protégé. A decision could also be made as to how these goals and objectives fit into the organization's mission. They should be relevant in a formal context and flexible in an informal setting. It should be noted that decisions on whether to use a formal or informal approach will alter the factors affecting the relationship.

This study's outcome has shed light on areas of formal mentoring that will have a strong effect on social change at the military and civilian levels. First, military leaders have a strong tool for structuring mentoring programs specific to their command and operational needs. They now have information to draw upon to find what contexts produce the most efficient mentoring practices that groom or develop military members to meet global challenges. Mentoring program managers may now evaluate if these study variables will play an interacting role in their programs. If one or more of these factors do have a mediating effect, they may then structure their programs to mitigate their
effects. Second, private sector organizations may also evaluate the effects of these study variables to change their programs. These organizations also have the opportunity to convert to an informal format if flexibility and is important to them.

Mentoring in my opinion is the catalyst to not only increase career and personal enhancement, but also as a lifetime legacy tool to pass down knowledge and experience to a younger and older generation. It is an atrocity to go through life and not teach what a person has learned to someone else. Mentoring is a process that builds on previous knowledge and research. It can be applied to virtually any field or discipline regardless of formal or informal contexts.
References


NAVMC. (2006, Feb). Marine Corps Mentoring Program (MCMP) guidebook. NAVMC Directive 1500.58


### Appendix A: Dyad Compatibility (Career)

*Dyad Compatibility Model Summary, ANOVA, and Coefficients*

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*Note.* Criteria .05; Probability .10

### Dyad Compatibility (Personal)

*Dyad Compatibility Model Summary, ANOVA, and Coefficients*

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### Appendix B: Mentor Training (Career)

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### Mentor Training (Personal)

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### Appendix C: Dyad Geography (Career)

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Dyad Geography (Personal)

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Appendix D: Mentor Functions (Career)

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*Note. Criteria .05; Probability .10*

Mentor Functions (Personal)

**Dyad Compatibility Model Summary, ANOVA, and Coefficients**

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*Note. Criteria .05; Probability .10*
### Appendix E: Mentor/Protégé Gender (Career)

**Dyad Compatibility Model Summary, ANOVA, and Coefficients**

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*Note. Criteria .05; Probability .10*

### Mentor/Protégé Gender (Personal)

**Dyad Compatibility Model Summary, ANOVA, and Coefficients**

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*Note. Criteria .05; Probability .10*
Appendix F: Challenging Job Assign (Career)

**Dyad Compatibility Model Summary, ANOVA, and Coefficients**

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**Note.** Criteria .05; Probability .10

Challenging Job Assignments (Personal)

**Dyad Compatibility Model Summary, ANOVA, and Coefficients**

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<td>0.340</td>
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**Note.** Criteria .05; Probability .10
Appendix G: Protégé Visibility (Career)

**Dyad Compatibility Model Summary, ANOVA, and Coefficients**

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Note. Criteria .05; Probability .10

Protégé Visibility (Personal)

**Dyad Compatibility Model Summary, ANOVA, and Coefficients**

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Note. Criteria .05; Probability .10
Appendix H: Mentor Leadership (Career)

**Dyad Compatibility Model Summary, ANOVA, and Coefficients**

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*Note.* Criteria .05; Probability .10

Mentor Leadership (Personal)

**Dyad Compatibility Model Summary, ANOVA, and Coefficients**

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*Note.* Criteria .05; Probability .10
Appendix I: Time Management (Career)

### Dyad Compatibility Model Summary, ANOVA, and Coefficients

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Note. Criteria .05; Probability .10

### Time Management (Personal)

### Dyad Compatibility Model Summary, ANOVA, and Coefficients

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Note. Criteria .05; Probability .10
### Appendix J: Protégé Career Expect. (Career)

**Dyad Compatibility Model Summary, ANOVA, and Coefficients**

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*Note. Criteria .05; Probability .10*

Protégé Career Expectations (Personal)

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*Note. Criteria .05; Probability .10*
Ladies and Gentlemen,

I want to take the opportunity to introduce myself. I am Jeffrey W. Strickland and I am a retired Chief Petty Officer (ATC). I spent 20 years working on F-14 and S-3B aircraft at the organizational level. It was an experience and gratification I will always treasure. My interactions and professional involvement with junior and senior sailors, as well as commissioned officers developed me into the scholar/practitioner I am today.

As a doctoral student at Walden University, I feel compelled to give back to the U.S. Navy’s aviation community. I am currently completing my dissertation on the U.S. Navy’s mentoring program and the protégé’s perceptions of it in a formal mentoring setting. I have a passion for mentoring and firmly believe it necessary to groom and develop our sailors for success and command readiness.

In order to accomplish this assessment, I will require your brief participation and 15 randomly selected enlisted members in the ranks of E1 through E6. The choice of participants will be left entirely up to your command. This will serve two purposes. One, it will reduce researcher bias I may bring into this study. Two, it offers convenience and flexibility on the commands part because of time constraints. There is absolutely no risk to your command or your sailors during completion of the survey.

I will ensure you confidentiality will be a high priority in this research effort. The test instruments (Likert surveys) are designed to solicit minimal and non-identifying information from the participants in as little time as possible. This is meant not to distract participants from their military duties. No identifying squadron or participant information will be solicited. The participant also has the right to withdraw at any time. Completed surveys will be retained at my residence in Jacksonville, Florida for a mandated minimum of five years and then destroyed.

Once again, I want to thank you for your service to this country and participation into this vital research effort. Your honesty in answering this short survey will be a vital link in possible revisions and restructuring to the program and ultimately enhancement of your own sailors. Thank you for your time and consideration.

V/r
Jeffrey W. Strickland (ATC, Ret).
Appendix L: Informed Consent Letter

Informed Consent Form

You have been asked to participate in a research study conducted by Jeffrey W. Strickland, USN, ATC(ret). I am a doctoral student at Walden University in Minnesota. This research study is being conducted under the leadership of Dr. Bidjerano and Dr. Demeter of Walden University’s school of Public Policy and Administration. This study is being conducted to fulfill the requirements of the doctoral dissertation. This research effort includes the collecting of data on the U.S. Navy’s mentoring program. My twenty years experience in Naval aviation has afforded me the opportunity to work with junior and senior sailors and be heavily involved in their careers and psychosocial growth. This program is important on many levels and often contributes to the success and efficiency of the aviation command. Your involvement in this research process is important since you are a direct participant in the program and have first-hand accounts of its strengths and weaknesses. This study will be conducted in the aviation field of the U.S. Navy only. This will involve active duty service members. No reservist members will be included.

This research study is guided by ten research questions These include:

1. Is compatibility with the mentor in career and personal areas affecting the protégé's satisfaction with the mentoring process?
2. Is the mentor's training affecting the protégé's satisfaction in a formal mentoring setting?
3. Is the aviation command’s operating environment affecting the protégé's satisfaction with the mentoring process?
4. Are adequate mentoring functions increasing the protégé's satisfaction in both career and personal settings?
5. Does mentor / protégé gender make a difference in the level of mentoring satisfaction provided in formal mentoring programs?
6. Is the mentor providing challenging job assignments for the protégé for professional growth and satisfaction?
7. Is mentorship networking increasing the protégé's satisfaction in the relationship?
8. Does the mentor possess an effective leadership style to influence satisfaction in the career, advancement, and development phases of the mentoring relationship?
9. Are mentoring meeting sessions between mentor and protégé a factor in the protégé's satisfaction with the mentoring process?
10. Is there a relationship between protege career expectations and their satisfaction in formal mentoring settings?

These questions are intended to understand variables and their role in formal mentoring settings. These questions are not specific to just the U.S. Navy, but all branches of the U.S. military as well.

Your involvement in the study requires answering 12 short survey questions at your leisure. There is no pressure on you to rush your answer to these questions. Your accuracy and honesty in answering will ensure validity in the study. Your participation in this study is strictly voluntary. Your decision to not participate will be respected. The survey should take around five to seven minutes to complete. The information provided by you will be anonymous and all survey questionnaires will be locked in a safe in my personal residence in Jacksonville, Florida. Participants have the right to decline participation in the study and may also discontinue participating at any time. All data received from the survey forms will be strictly confidential for the protection of you and your co-workers. Your participation in this research effort will generate valuable data for improving the U.S. Navy’s mentoring program to develop junior and senior sailors. There
is absolutely no risk to you. Study participants are welcome to keep / print a copy of this consent form for their own personal records.

Participants have the right to contact this researcher for study questions or clarification. Participants also may contact the Walden University IRB board directly at IRB@Waldenu.edu for further questions and concerns. Walden University's approval number for this study is 06-05-14-0158173 and it expires on June 3, 2015. To protect your privacy, no consent signature is required. Instead, your completion and return of this survey will indicate your consent if you choose to volunteer.

Thank you for your time and participation.

Jeffrey W. Strickland, USN, ATC (RET)

Faculty advisors: Dr. Morris Bidjerano; Dr. Lori Demeter
Appendix M: Study Survey

Place an “X” in the appropriate box.

(1). Your gender: male or female
   Male:           
   Female:        

(2). Is your mentor male or female
   Male:           
   Female:        

(3). Your rank:  
   E1:    E2:    E3:    E4:    E5:    E6:    

(4). Time in service:  
   1-3 yrs:  4-6 yrs:  7-9 yrs:  10-12 yrs:  13-15 yrs:  16-20 yrs:  

Place an “X” in the appropriate box.

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<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
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<tr>
<td>(5). My mentor's career goals are compatible with mine.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>(5b). My mentor's personal goals are compatible with mine.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>(6). My mentor is properly trained in mentoring techniques to enhance my career advancement.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>5</td>
</tr>
<tr>
<td>(6b). My mentor is properly trained in mentoring techniques to enhance my personal advancement.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>(7). My command's operating environment affects the relationship I have with my mentor on career advancement.</td>
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<td>2</td>
<td>3</td>
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<tr>
<td>(7b.) My command's operating environment affects the relationship I have with my mentor on personal enhancement.</td>
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<td>3</td>
<td>4</td>
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<td>(8). My mentor is providing adequate mentoring activities during career meeting sessions.</td>
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<td>3</td>
<td>4</td>
<td>5</td>
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<td>(8b). My mentor is providing adequate mentoring activities during personal meeting sessions.</td>
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<td>2</td>
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<td>(9). The gender of my mentor makes a difference in the level of mentoring provided for career advancement.</td>
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<td>3</td>
<td>4</td>
<td>5</td>
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<td>(9b). The gender of my mentor makes a</td>
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<td>difference in the level of mentoring provided for personal enhancement.</td>
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<td>(10). My mentor is providing me with challenging and rewarding job assignments to increase my career advancement.</td>
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<td>(10b). My mentor is providing me with challenging and rewarding job assignments to achieve my personal goals.</td>
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<td>(11). My mentor provides me with visibility and networking opportunities for career advancement.</td>
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<td>(11b). My mentor provides me with visibility and networking opportunities for personal development.</td>
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<td>(12). My mentor's leadership style is appropriate to facilitate increased learning in the career area of my development.</td>
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<td>(12b). My mentor's leadership style is appropriate to facilitate increased learning in the personal area of my development.</td>
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<td>(13). I am comfortable with the meeting frequencies with my mentor to discuss career goals and objectives.</td>
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<td>(13b). I am comfortable with the meeting frequencies with my mentor to discuss personal goals and objectives.</td>
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<td>(14). My command's mentoring program exceeds my expectations for career advancement.</td>
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<td>(14b). My command's mentoring program exceeds my expectations for personal advancement.</td>
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Thank you for your time and honesty.

Remarks

____________________________________

____________________________________

____________________________________
From: Commanding Officer, Helicopter Control Wing, Atlantic
To: Jeffrey W. Strickland, Contractor, HSM 40

Subj: AUTHORIZATION TO ADMINISTER AND CONDUCT
MENTORING RESEARCH AT THE ORGANIZATIONAL
LEVEL.

1. As requested, you are hereby authorized to conduct research interests in the field of
aviation mentoring at the organizational level of maintenance. Conducting research at the
intermediate level of maintenance is not authorized.

2. You are hereby authorized to distribute research instruments and other means
necessary to collect and disseminate your data.

3. Data collected on your behalf will be secured at the highest level available to you to
ensure confidentiality and anonymity. This will be your responsibility at all times
throughout your study. Storage of research documents will not be allowed at any aviation
command.

4. You will not be authorized funding or use of any government resources to collect
your data. All resources must be fully funded by you throughout your study.

Good luck with your endeavors into this field. Fair winds and following seas.

T.M. Sill
Appendix O: Study Approval Letter

DEPARTMENT OF THE NAVY
STRIKE FIGHTER SQUADRON ONE FOUR SEVEN

FROM: PUBLIC AFFAIRS OFFICER
TO: JEFFREY STRICKLAND (ATC, RET)
SUBJ: APPROVAL OF RESEARCH

Mr. Strickland

Your request for conducting research at VFA-147 has been approved. The following terms and conditions must be adhered to at all times during your visitation at VFA-147.

1. Your study must not duly interfere with squadron personnel maintenance efforts.

2. No government resources will be available to you at any time. This will be your responsibility.

3. Completion of the participant survey must occur during off-duty work hours. The place or establishment for completion is your choosing.

4. Confidentiality is the utmost importance.

The staff and members at VFA-147 team argo wish you the best. Your prior military service and interest in this program will surely benefit current and future U.S. Navy sailors.

Cimicata, T.F, CDR
Appendix P: Study Approval Letter

GARUDAS

05 June 2014

Mr. Jeffrey W. Strickland

Authorization has been granted to you for your education project. You may commence distributing your study items to squadron personnel only once your check-in with appropriate squadron managers. Our deployment is fast approaching so squadron participants maybe intermittent in completing the survey.

Your are asked to conduct business professionally and be courteous to service members in the performance of their duties. Remember, the flight schedule takes priority over other squadron operations and functions. For this reason, you are asked to allow squadron members to complete their assigned tasks before administering your study items.

Have a nice day and thank you for your service to this country.

Buckles, A.F, LCDR, USN
Appendix Q: Study Approval Letter

HS-10
WARHAWKS

FROM: COMMANDING OFFICER
TO: CIV. JEFFREY W. STRICKLAND

SUBJECT: SQUADRON MENTORING RESEARCH

It is with great honor to allow you to undertake research on our squadron’s mentoring program. It is anticipated your endeavors will enhance the quality of the mentoring experience for mentors and mentees alike.

Your autonomous actions must be kept with the highest standards of the U.S. Navy. Information obtained from your study must be kept in strict confidence to protect sailors' rights. We wish you luck with your research and educational efforts Mr. Strickland.

Fair winds and following seas.

V/R

[Signature]

HS-10
FROM: COMMAND MASTER CHIEF

TO: JEFF STRICKLAND, CIV

CC: MMCO Miller

SUBJ: APPROVAL FOR STUDY

8 JUNE 2014

It was determined your study will not impact squadron readiness and it is with great pleasure we welcome your efforts and inquiries into Naval mentoring. If you have questions or require assistance during your visit, feel free to let us know.

Command policy is to adhere to strict confidentiality when conducting your education research here. For this reason, you will be asked to keep track of and maintain all study documents.

V/R

MacKenzie, J. R.

[Signature]
Appendix S: Study Approval Letter

DEPARTMENT OF THE U.S. NAVY

June 7, 2014

Chief (AW/SW, ret) Strickland

It is a privilege to welcome you aboard the Patrol Squadron forty six family. Permission has been granted to survey personnel E6 and below for your mentoring purposes. If service members outside these pay grades are to be included in your research, then the squadron must be notified in advance. A training room will also be available to you for administering the survey if necessary.

Thank you for your interests in the patrol squadron community.

Brinson, T.M, CDR

CC: MMCPO Lapp
DEPARTMENT OF THE NAVY

1330

07 JUNE 2014

FROM: PAO

TO: MR. JEFFREY STRICKLAND

SUBJECT: AUTHORIZATION FOR MENTORING VISIT

(a) You are hereby authorized to obtain University study data concerning you’re your mentoring research study. It is expected your conduct around the squadron members will be professional and discrete concerning work duties.

(b) Due to squadron obligations, you will not be authorized funding in no way to complete your study. A word of thanks is extended for your efforts. Storage of your data will be your responsibility. The squadron will not be held responsible on your behalf.

On behalf of the men and women of VAQ-132, we wish you the very best Mr. Strickland.

McCombs, W.R., (CDR)
Appendix U: Study Approval Letter

UNITED STATES NAVY
Fleet Logistic Support Squadron Five One (VR-51)

FROM: Public Affairs Officer
TO: Jeffrey W. Strickland
SUBJECT: Study research.

Your inquiry about conducting research at VR-58 has been approved by the chain of command. The following conditions must be met by you:

1. You will be allowed to interview and distribute study materials to service members on home guard duty only.

2. Your research interests cannot be conducted during the squadron member's working hours or in the performance of a duty watch.

3. Deviations from the established informed consent form and intent letter must be approved by the chain of command.

Bailey, M.O.

Good luck, Chief Strickland!